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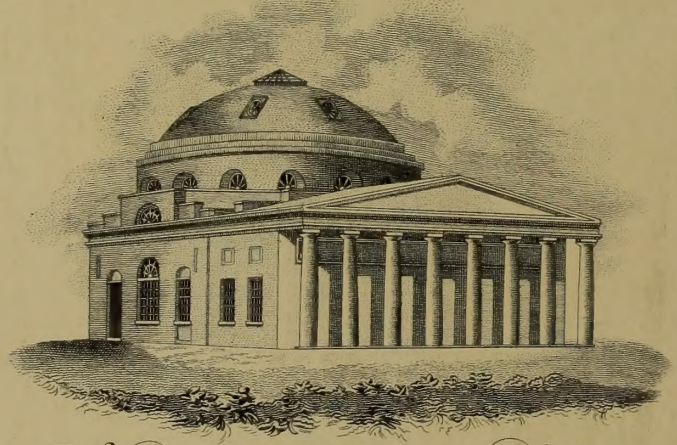

University of Maryland

University of Maryland Theses

Early Doctor of Medicine and Doctor of Physic Dissertations with Corrected Tables of Contents

These manuscripts described as either an Inaugural Dissertation or an Inaugural Essay were presented to the University of Maryland for the Degree of Doctor of Medicine and/or Doctor of Physic during the years 1813-1887. The individual dissertations were bound together during the 1940's. The original tables of contents for the bound volumes contained multiple errors in authors' names, titles, and/or years. To address these errors, an additional "Corrected Table of Contents" has been inserted at the beginning of each volume.

The project team who investigated and corrected the tables of contents were Richard J. Behles, Historical Librarian/Preservation Officer; María Milagros Pinkas, Metadata Management Librarian; Angela Cochrane and Carol Harling-Henry, Resources Division; Sarah Hovde, Abra Schnur and Megan Wolff, Services Division.

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1873

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Ashby, Thomas	Vaccinia	(Stained)
Worthington, J. C.	Degeneratio Cordis Adiposa	(Stained)
Jones, G. Monroe	Acute Dysentery	
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Scholl, Charles E.	Tubercular Meningitis	(Stained)
Winchester, A. J.	Causes of Abortion	(Stained)
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[1] No title on cover page; title taken from the 8th page of thesis.

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Author	Title	Physical conditions
Baldwin, Joe S.	Phthisis Pulmonalis	(Stained)
Miller, James B.	Cholera Infantum	(Stained)
Warner, F. A.	Inflammation	
Beard, Stephen	Typhus Fever	
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Harrington, J. E.	Typhoid Fever	(Stained, torn pages)
Shackelford, J. A.	Pathology of Inflammation	(Stained, illegible)
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HSHSL 2012 for the UM Digital Archive. Sources consulted for corrections: Original Dissertation; University of Maryland Medical Faculty, Matriculation List, 1851-1892; Cordell, Eugene F. "University of Maryland, 1807-1907" (New York : The Lewis Publishing Company, 1907), Volume 2.

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THESES

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Clarke, ~~A.~~ Andrew P.	Hernia	30p.
Bullock, ~~D.~~ David W.	Entero-colitis	25p.

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Rogers, William Hughes		
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Harrington, J. E.	Typhoid Fever	20p.
Shackelford, J. A.	Pathology of Inflammation	17p.
Crothers, Ransom ~~R~~. R.	Hernia	19p.

A Thesis

on

General Pathology

Respectfully Submitted

to the

Faculty of the

University of Maryland

by

R. H. Coyle

of Virginia

WMb
18965

1875

Of all the branches of Medical Science there is none so attractive as a study, none so important in its results, as Pathology. The Physician views it as a centre around which are disposed, at unequal distances the other natural sciences. The study of Anatomy & Physiology of Chemistry & Physics of Botany and Materia Medica afford him but an introduction to that of Pathology. He views them as accessory sciences. And notes only those which are nearly

to with the knowledge of
disease & its appropriate mode
of treatment. Pathology
like the other sciences is with-
out limits. While Botany, Zoology,
Chemistry, Mineralogy &c are daily
extending their domains, the sci-
ence of disease is rapidly advan-
cing. Throwing aside its theories
& its systems no one is possessed
of all the knowledge of pathologi-
cal science. Pathology has been
divided & sub-divided to a very
great extent, the most important
is that distinction of diseases
medical & external or surgical.

pathology. The diseases of remote children those seated in the splanchnic cavities have undergone division but in no instance has the investigation of a special group of diseases been of profit to the science, except so far as those who have devoted themselves to these studies have been well versed in the other branches of pathology. General pathology treats of diseases in the true abstract and of whatever is common to them, includes all under the same head studies their general characteristics causes and development

the succession & connection of
their causes showed during
life the appearance after death
and the circumstances which modify
their progress. And by which we
are enabled to prognosticate
the changes which will take
place in their course. Patho-
logy treats of the seat of disease
Etiology (or the cause of disease)
Symptoms. Progress and terminations
of disease Convalescence. Varieties
Complications. Diagnosis. Progno-
sis Morbid Anatomy (Post-Mortem Examina-
tions) Therapeutics & Nature
of Disease. Seat of disease

All the constituent parts of the human body are susceptible of some change. It may therefore become affected with disease of greater or less severity. The susceptibility to the various causes of disease varies in different organs. The skin and mucous membranes are of all tissues those in which diseases are most frequently observed. The organs which are deep seated and have no direct communication with external objects are less prone than all others to the action of diseases. It is

very difficult to determine the seat of disease. It was formerly supposed that the primitive seat of most diseases was in some one of the fluids which enter into the organization of the economy. Then again the solids were considered to be the seat of diseases. Both of these systems are alike inadmissable. Many diseases are complex in their character, affecting primarily the solids and afterwards extending to the fluids of the body & "vice versa". The following are some of the many

diseases which affect nearly
all the tissues of the body, (viz)
Inflammation Cancer Tubercles
and Syphilis. Others are observed
in but a few as Dropsy. which
is peculiar to the membranes
which line the interior of
cavities. and to the cellular tissue
Spontaneous hemorrhage rarely occurs
except from the mucous membranes
There are also other affections
which appear to be constantly & exclusively
confined to the same anatomical
element such as Rheumatism & Gout
which are peculiar to the muscular
& fibrous tissues. There are many

Diseases which affect but a portion of the economy have but a single seat, such as Pneumonia & Pericarditis. There are others which expose simultaneously in parts more or less remote from each other exhibiting the same forms & characteristics. These have a multiple seat such as variola, rubeola, the syphilitic eruptions &c. They are generally secondary. Those which exist in pairs are often affected at the same time Bronchitis generally affects both lungs. And in Rheumatism

-cardiac articulations become successively affected. There are however exceptions to this rule. The two testicles or the two ovaries are rarely the seat of disease simultaneously. Age has a marked influence upon the seat of disease. During infancy the head is the seat of numerous affections the slightest of which are accompanied with convulsions. At puberty & during the period of youth affections of the chest are most common. While the adult is more prone to diseases of the abdomen. Lastly in old

age the abdomen contains the seat of various disorders. The urinary organs become liable to a great extent & the head is again susceptible to morbific changes. The seasons also have a marked influence upon the seat of disease. Etiology or the cause of disease. The causes of diseases are everywhere present-exist around us within us- the air we breathe. the food & drink which go to nourish the body themselves give rise to the ills with which we are afflicted. The causes are divided into

external, internal & predisposing. Besides these are several other divisions which are not important. External causes are those which surround us, viz. Cold, Malaria &c. Internal causes are those which exist within us, (Hereditary). Predisposing causes are for the most part diffused throughout the atmosphere or arise from certain local conditions. The professions & men also predispose to disease. Lifeinsurance are subject to sudden & unexpected deaths many die of apoplexy. Labourers are subject to hernia

Intermittents is of frequent occurrence in Worsenen Poverty also has a great deal to do with disease. Look at the alleys & courts of our large cities, see the filth & dirt which the bowels of the poor contain, & it is no wonder that we have Variola & Cholera & Scurvy & Scrofula are also common among the poor while the rich are more often affected with inflammatory & nervous affections Pregnancy has a tendency to cause disease, Change of climate is also a predisposing cause

Persons going south early
in the fall often experience
some disorder within the
first few days. Diarrhoea &
clothing worn too thin favor
the action of causes produc-
tive of catarrh & rheumatism.
That which is too warm is
also injurious as it increases
the susceptibility. The exposure
of the neck & arms among
females tends towards Phthisis
& other affections of the
thoracic viscera. Cumbrousness
is also a decided effect upon
the body in causing lassitude.

Garters. Corsets &c. which are internal causes prevent the growth & development of the heart. Compression however slight if long continued caused by surgical apparatus bandages &c. may sensibly diminish the volume of the part compressed, & may sometimes cause acceleration of that of the limb in which the venous circulation is obstructed. The effect of compression is due in a great measure to the time during which it is continued. A tight shirt

may be very violent provided
it is not carried far enough
to cause an alteration in the
tissues of the organs. The cells
immediately regain their size &
the full exercise of their functions.
After longer compression for
some days or weeks, the natural
condition is slowly but may be
completely regained. The extent
of surface over which compression is applied, also modifies
its effects. A narrow bandage may
constrict the tissues which it
circles, but will not. When com-
pression is maintained, there

over a circular surface of the limb
the circulation becomes retarded
below the part of application.
This does not happen if the com-
pression extends to the extrem-
ity of the limb. Standing upon
feather beds, by increasing dimi-
nishes the formation
of urinary calculi. In diseases
of nephritis, a hard bed is
beneficial, rather than a cause
of disease. The frequent use
of the cold bath is thought
to cause inflammatory diseases
by their tonic action upon
most of the organs. Warm

to the liver, not the slightest effect. They weaken the constitution & dispose to chronic diseases & diseases of debility. Want of cleanliness favors the development of contagious & cutaneous diseases. Excess of cleanliness combined with the use of perfumes & the various resorts of luxury, aids the production of nervous diseases.

Symptoms. A symptom is any change perceptable to the senses which may occur in any organ or function & connected with the existence of disease. They

should not be confounded with
symptoms or signs. The symptom
is recognized by every one. The
Physician alone detects the signs
in the symptoms. The body becomes
increased or diminished in volume
in many diseases. a slight increase
occurs in febrile heat and in
the second stage of intermittant
fever, while in the first or cold
stage diminution takes place.
A great increase in the vol-
-ume of the body when occurring
in disease is almost always
owing to the infiltration of
serum into the cellular tissues.

The skin general is called
Anasarca & when partial,
oedema. The color of the skin
varies according to its climate,
age, sex, occupation &c. In some
affections the color of the skin
remains unchanged, but in nearly
all grave diseases there is a
perceptible change in the
natural color of this membrane.
It is pale in the cold stage of
intermittent fever, also in some
cases of scrofula & chlorosis. It
is yellow in adynamic diseases as
in the last stage of grave &
epidemic dysentery & when

so in Typhoid. It is [illegible] in scarlet fever. Citron or dusky yellow in jaundice. Red of a bluish tint in Asiatic cholera. In many diseases the skin becomes dry & rough & resembles parchment. The head furnishes a great many symptoms. It is inclined laterally in convulsions it is bent backwards in croup. Red is inclined forward in cases of malformation of some of the vertebrae. Also in Cerebro-Spinal-Meningitis or Yaw. Glanders & Pleurothotonos & Opisthotonos. The expression of the face & eyes are-

the eyeballs. The eyes are fixed in catalepsy. Their motions are convulsive in the Hydrocephalous of children. Strabismus is almost always the effect of cerebral disease. Rapid, & repeated motions of the eyelids is observed in some cases of mania, and idiocy, in other cases as in adynamic fevers their motions are slow & occur at long intervals. In cephalalgia they have a feeling of weight. They are constantly closed in comatose affections. And in some cases of opthalmia their closure is accompanied

with a violent contraction
of the muscles. It is sometimes
impossible to close the
at all on account of loss of
contractility of the Orbicularis
Palpebarum, caused by a lesion
of the nerve which supplies
it: which produces partial par-
alysis. The eyebrows are raised,
in the furious delirium of fevers
& paroxysms of mania, and depr-
essed in cases of melancholy, &c.
violent cephalalgia. The fore-
head, nose, temples, cheeks and
mania all contribute something
to this branch of Pathology.

The chest is narrow & flat in Phthisis. & prominent in emphysema of the lungs. The abdomen may be increased or diminished in volume under the influence of [illegible] the symptoms do not mani- fest their appearance at the com- mencement of disease. In those whose course is rapid, the principle symptoms are generally developed about the second or third day. In those which progress slowly, they may not appear for several months & sometimes for years.

Progress of disease. Some diseases are of an equal intensity throughout their course while in others we have exacerbations, some increase regularly in intensity from the attack to the termination. There are others which have their maximum intensity at the outset and gradually become less serious. Climate has a certain influence upon the progress of disease. Heat. Cold. Food. Agitation of mind. The passions &c all exert a marked influence upon the progress of disease. The duration

& duration varies from a few
moments to many years.
Terminations of diseases, Sometimes
affections continue throughout
life & are not fatal to the
patient such are certain
forms of paralysis & chronic
rheumatism, By the termination
of disease, we mean either a
complete restoration of all
the functions of the body to
their normal conditions, or death.
Convalescence, This is an inter-
-mediate state between disease
which no longer exists & health
which is not restored, It begins when

the symptoms of the disease have disappeared, & when the functions of the body act regularly. The Varieties of disease are too numerous to mention. Their name is Legion. Complications. The simultaneous existance of similar lesions in organs more or less remote from each other. does not constitute a complication. He may have Typhoid fever or Pleuritis with Pneumonia. This is a complication. Diagnosis. Is the discrimination of diseases. To discriminate a disease is to recognize it when

exist wherever it seems, & also decides that it does not exist whenever other diseases appear with symptoms similar to its own. Diagnosis is the most important, most useful, & most difficult of all the divisions of medical science. Without an accurate & precise diagnosis there is always at fault, & practice then unfaithful. Diagnosis, in some cases is very simple & easy, the some diseases we have pathognomonic signs which are easily discernable. The signs of

-ceived by the physicians
are never have an entirely
different value from those
derived from the account
of the patient & his attendants
He should ~~also~~ form his opin-
-ion by the aid of the former
To form a true diagnosis the
physician should have a thor-
-ough knowledge of Pathology
should have bed-side examin-
-ations and assist at many post-mortem
examinations. Auscultation.
Percussion. Palpation. Exam-
-ination per rectum. The Ophthal-
-moscope. Laryngoscope. Etc etc

ul essential to a good diagnosis
Prognosis. This branch
pathology treats of the termi-
nation of diseases. Nothing is
better suited to win the con-
fidence of the patient and his
attendants than a confirmation
of the prognosis by after events.
And nothing injures the physicians
reputation more than an
error in this respect. Prognosis
consists alone in foretelling that
a disease will, or will not prove
fatal. It enables us to recognize
existing affections which are
not fatal, those which

terminate in complete re-
-toration to health. Those
which will remain stationary,
and those which will diminish
or increase gradually during
life, Necroscopy, signifies a
post-mortem examination-
And is too voluminous a sub-
-ject for a "Thesis", or a part
of one, Therapeutics. Therapeutics
is the branch of pathology which
has for its object the treatment
of disease. A great majority of
diseases are cured by the pow-
-er of nature alone without
the aid of active treatment

From this source the usurped reputation of thousands of Quacks. No disease can be cured by art alone. All remidies are powerless when nature does not respond to their action. In surgery, as in medicine. Therapeutics (in the majority of cases) merely favors the action of nature, which unassisted would be able to restore an inflamed organ to the healthy state, cicatrize a wound, and unite the fragments of a fractured bone.

Respectfully &c

F. H. Gayle

of Virginia

An
Inaugural Dissertation on Chancre
or
The initial lesion of Syphilis
by
Randolph Winslow A.B
Baltimore Md
February 7th 1873

An

Inaugural Dissertation

on

Chancre

or the

Initial lesion of Syphilis

By

Randolph Winslow AB

of Baltimore, Md

– Chancre or The initial lesion of Syphilis –

Formerly all sores upon the genitals were regarded as being syphilitic in character, and no discrimination was made as to their or as to their origin or course. As science, however progressed in her ever onward march, certain broad distinctions, began to be noticed, and Gradually the terms hard & soft, Chancre came into vogue. But they were confined to the more varieties of the same disease. And, the power of fully investigating & determining, the characters, belonging to each & peculiar to each, has been reserved for those of the present day. We now recognize but one chancre, which we define to be, the primary sore, resulting from syphilitic infection of the system and which appears at the point through which the syphilitic virus first gained access into the system. The favorite seat of chancre is upon or around the genitals.

the parts most liable to exposure, but it may appear upon any part of the body, which can be contaminated by the virulent secretions, either of a chancre or of the secondary lesions. Thus the lips are not infrequently affected, from mucous patches upon another's lips, during the act of embracing. The female breasts are likewise subject to great exposure, and consequently it is no rare thing to find them inoculated. Sometimes the disease is communicated by means of instruments which the careless operator has neglected to cleanse, as when the Eustachian tube is contaminated during the operation of catheterization. whilst in some few cases we are at loss to tell how the matter was introduced, - as in a case reported, in which the chancre was situated upon the inner surface of the upper eyelid. Clinical History. - It is either in-

festations of zymotic diseases, time is required for the virus to undergo full development, or at least to work such changes that its presence shall be recognized, so also in Syphilis. A period of incubation belongs to the clinical history of the disease - This period is generally about 3 weeks in duration but it varies from this time to 50 days, which is the longest period of incubation noticed by Dr Bumstead - This period of incubation possesses much diagnostic value, and it may be regarded as an almost invariable law. "That when a sore appears 3 or more weeks after exposure, it is due to syphilitic infection and not to inoculation with the matter of a chancroid". First in the clinical history will come a slight abrasion or scratch, by means of which the virus is absorbed into the system. This abrasion is often so slight and

heals up with such rapidity as not to attract the patient's notice. Next follows a period of incubation about 2 weeks in duration, at the expiration of which time the first manifestations of the chancre are made. A papule or tubercle appears upon the seat of the former excoriation; this may in some rare cases remain intact; but ordinarily ulceration sets in, which increases in extent & depth until the true chancre-type is presented. In form, the chancre often departs widely from what has heretofore and is even to a certain extent now regarded by Authors, as typical, but still there is generally a certain regularity of form preserved, being circular or ovoidal. Sometimes however it is so irregular as to defy description. As there is great variation in the outline of different chancres so likewise is there in the extent of tissues involved. One variety appears as a ~~simple~~ more ~~or~~ abrasion or superficial erosion, & unless great vigilance is ex-

excised, will be mistaken for simple non-specific sore, until the appearance of the secondary symptoms puts to shame our previous diagnosis. This variety is most marked upon the internal surface of the prepuce. It is generally oval in outline, the floor is not excavated + may even be elevated above the ~~subjacent~~ surrounding tissues, by the subjacent infiltration. The surface is smooth + polished and of a red or grayish color, unless dark from molecular gangrene. Sometimes a false membrane covers the centre of the sore, gradually fading off into the circumference. It is slightly greenish, translucent + pultaceous in appearance. and may be distinguished from the secretion of a chancroid by color and the extent of surface over which it extends. Its secretion is chiefly clear serum, destitute of pus globules unless irritated. The superficial chancre disappears without any loss of substance, and

consequently it leaves no cicatrix - Between this superficial erosion and the true Hunterian Chancre, which is characterised by great excavation & induration of the base & edges, there are many gradations, which partake more or less of the character of both - In the Hunterian chancre, the ulcerative action has extended through the whole thickness of the skin or mucous membrane, and presents us with an ulcer, circular in form, with sloping, prominent & adherent edges, and a cup shaped cavity - Sometimes the ulcerative action may extend a short distance below the skin & mucous tissue, but it rarely eventuates in phagadena - In some very rare cases however an extensive phagedenic ulcer is the initial lesion of syphilis, and in such cases, the secondary lesions are generally very intractable & severe. Synchronous with the development of the chancre, is a

certain amount of induration noticed, varying more or less in different cases. Sometimes this induration even precedes the chancre, but such cases are rare. much oftener the induration is delayed, a week, two weeks or longer, but if after the lapse of 3 weeks ~~have elapsed~~ no induration appears. we are justified in considering the ulcer due to some other cause than Syphilis. This induration is peculiar in its ~~appearance~~ manner of forming and in its progress when formed. It does not announce its approach by the usual phenomena of inflammation, viz heat, redness, swelling and pain, but insidiously it creeps on, unfelt, unnoticed in the majority of cases, until accidentally discovered by the touch. Specific induration differs moreover from simple inflammatory induration, by having its edges clearly defined and abruptly terminated and by being freely movable upon the subjacent tissues. In the true Hunterian Chancre

the induration is very hard, firm and resistant, and resembles a split pea under the skin or a mass of cartilage - There is another sort of induration, not as often met with as the first, which involves the skin and mucous membrane alone, and does not extend to the cellular tissue beneath; this from its tenacity is called parchment induration, and imparts to the finger a sensation as if the chancre rested upon parchment - This is most common in the superficial erosions, and may be readily overlooked by one not familiar with it - The seat of the chancre greatly influences the amount of induration, being the greatest in those parts in which the cellular tissue is abundant & lax, as in the lips - Specific induration usually lasts a long time unless dissipated by treatment, Several months is the rule, and Punch met with induration at the end of nine years, Ricord with one at the termination of thirty-

— Clinical History of Chancre continued —

The parchment induration sometimes pursues a different course, and may disappear before the cicatrization of the chancre, but ordinarily it is as durable as the other. Absorption is finally accomplished by the gradual fatty degeneration of the effused materials. Induration is a symptom of the most vital importance, in its relation to diagnosis, and generally according to its presence or absence will our decision be given. The secretion of a chancre is scant, serous & destitute of pus cells unless irritated. It is highly contagious when inoculated upon another person, but is not auto-inoculable except in a few very rare cases, in which it has been applied very early in the disease, whilst the system seems not to be fully under the influence of the ~~syphilitic~~ bonefic virus. There is no absolute rule, as to the duration of the chancre, the secondary lesions contrary to the formerly received opinion, appear

before the cicatrization of the sore, in more than half the cases. The usual termination of chancre, is in cicatrization, without loss of substance. In the majority of cases nothing is left, to indicate its site except some amount of induration, but sometimes when situated upon the skin, a characteristic brownish-red or copper colored spot is left, which points with unerring finger to the past disease*. A fact worthy of notice is that the chancre may heal, but leaving an induration, which in turn takes on ulcerative action and reproduces a sore identical with the original ulcer in every respect. Phagedena may occur in this second sore, and is likely to prove especially severe. Sometimes the chancre after having progressed favorably in the process of repair, remains stationary for a time. Then the characteristic membranous follicle of the mucous patch is formed and the initial is converted into a

secondary lesion. Unlike the chancre, these rarely appear in groups. Generally single if they are multiple, it is due to the fact that several abrasions are inoculated in the same sexual act. If single at first, it continues to be so, as the system ceases to respond to the action of the syphilitic virus, when once infection has fully been accomplished*. A symptom of great importance to be borne in mind, as pointing to the existence of cancer is adenopathy of the neighboring lymphatic glands. Whether situated upon the penis, the breast, or any other part of the body, the nearest glands will be found enlarged, indurated, freely movable, feeling like marble under the skin. This induration is due to the same cause as induration of the base, and is formed in the same way, without any evidence of inflammation. The adenopathy is very persistent and remains for a long time, neither advancing nor receding, but resolution generally is accomplished

at length without suppuration having taken place. Suppuration is one of the rarest events, but to doubt that it does sometimes happen ~~sometimes~~ would be to deny the veracity of some of the most distinguished names in the profession. The glands of the same side as the chancre are the ones affected, but when the sore is situated upon the median line this does not hold good. The induration of the glands is coetemporaneous with the induration of the base. A complication of interest, and one which may lead to an error in diagnosis, unless the condition is recognized, is what may be called a periadenitis. The enlarged and indurated glands by continual pressure outwards may cause sloughing of the intervening skin & areolar tissue, with protrusion & sometimes almost a buttoning of the glands themselves. This complication I observed in several cases during the summer term at the University Hospital, and presents a great similarity

Causation of the Chancre &c - Diagnosis -
to the suppurating bubo of the chancroid -

Causation ~ As is well known, the chancre is the result of inoculation of the secretion of a chancre, of a secondary lesion, or of the blood of a person infected with syphilis - but the virus appears to lose its activity when the disease advances into the tertiary stage. Beyond these facts we know little or nothing, except that as in other constitutional diseases, an element foreign to the system is introduced, which acting as a catalytic, induces such changes in the organism, local & remote, which collectively we recognize as Syphilis. What this contagious element is, we know not, nor why such results follow its introduction. The microscope reveals nothing ordinarily, but it is due to Prof Salisbury of Cleveland Medical College, Ohio to state that he suspects the virus to be of cryptogamic origin, but we must learn his authority.

Diagnosis — There are several signs of the greatest importance in the diagnosis of Chancre, these are its period of incubation, induration of the base and edges of the sore and induration of the lymphatics glands. The two last symptoms are very constant, induration of the gland being the most reliable*. Absence of induration of the base can not be relied upon always, as sometimes it disappears very soon, and may not be recognised until general Syphilis results. Induration following the application of caustics or astringents to simple sores or chancroids must be carefully diagnosticated. From Balanitis or simple excoriations, it must be discriminated by its period of incubation, its great persistency & induration of base & of the glands*. When a chancre exists within the urethra, it may be mistaken for Gonorrhoea, but the discharge is scant, and watery, not copious & purulent as in the

other affection, the pain & burning upon micturition is localised and does not extend the whole course of the urethra as in Gonorrhœa. If an indurated spot can be felt along the course of the urethra and the inguinal glands are involved, in connection with the other symptoms, the diagnosis may be considered complete. A chancre however, beyond the reach of vision upon forced separation of the lips of the meatus is very rare, and may then be recognised by the endoscope. In practice, the diagnosis lies between the Chancre, & Chancroid, in the vast majority of cases, and most important is it to recognise the distinction, both as regards prognosis and treatment. Since they differ in their origin, that Chancre always being due to contagion from the secretion of a chancre, syphilitic lesion or from the blood of a syphilitic person. The chancroid is always due to contag-

gin from the secretion of a chancroid, chancroidal bubo or lymphatitis, But ordinarily it is impossible to confront the original source of the disease. The periods of incubation possess great diagnostic value. that of the chancre being generally 2 weeks in duration, rarely less, often more. The chancroid has no period of incubation, generally appearing in 48 hours, rarely longer delayed than 1 week. They differ in their manner of commencement, the chancre beginning as a papule or tubercle, which ulcerates and assumes its characteristic appearance. The chancroid begins either as a pustule or as an open ulcer. The number of sores is significant. The chancre seldom appears in groups, being generally single, when multiple it is so from the first. The chancroid may be single at first, but seldom remains so, as its secretion is auto inoculable very readily. Important information may be elicited from the

Diagnosis of Chancre continued - Treatment

amount and character of the ulceration in the two cases. The Chancre is often a superficial erosion, involving only the mucous membrane or skin. It appears scooped out, but may be either flat or excavated. When extending through the whole thickness of the skin, it is cup shaped, sloping from the periphery to the centre. The Chancroid perforates the whole thickness of the mucous membrane or skin, and appears punched out or worm eaten. The edges of the chancre are rounded, bevelled and adherent; those of the chancre are irregular, sharply cut + undermined and terminate abruptly. The floor of the chancre is smooth + polished, red, livid, or copper colored. The chancre has a whitish, grayish and pultaceous base. The secretion of the chancre is scant, serous, and auto-inoculable with great difficulty. That of the chancroid is abundant, purulent and readily auto-inoculable. Induration of the base is one of the most characte-

ities of the chancre. It is almost absolute in its contagion, and is firm, cartilaginous, & movable in some cases, in others it is thin, and gives the sensation of parchment to the fingers. It often remains for weeks, months & even years. Chancres which have suppurated, have no induration at all. Sensibility does not belong to Chancre to any marked extent, but is often very violent in Chancroids. Phagadena is rare and limited in the chancre, on account of the rapidity of plastic material. It is not very unfrequent in Chancroids, and may make fearful ravages. One chancre affords complete protection against another, Chancroids may affect the same person many times. Probably the one most important diagnostic mark is the affection of the lymphatic glands. The are always enlarged & indurated, without any evidence of inflammation. They are painless, freely movable, rarely suppurate & when this does

happen, the pus is not auto-inoculable. In Chancroid the glandular enlargement is often absent, when present, there are marked evidences of inflammation, viz heat, redness, pain & swelling, & suppuration is the rule, and the pus is auto-inoculable and inoculable upon another person. Prognosis - As Chancre is only the first local manifestation of a constitutional disease, whenever we find a true Chancre, we know that secondary symptoms will follow in a more or less regular manner. And although we can promise the cicatrization of the sore, without much if any loss of tissue, beware! how we promise immunity from the effects of the disease. Treatment - Formerly when Chancre was believed to be the origin of Syphilis, the opinion prevailed that if the inflicting surface was destroyed before absorption of the virus had taken place, constitutional infection would

be prevented. Even Ricord in his earlier days, advocated the doctrine that if caustics were applied within four days had elapsed, infection would not be allowed. Now we know that the abortive treatment as it was called is useless, as the infection has already taken place. Locally a mild astringent wash may be applied to the ulcer, such lint. solution of alum, carbolic acid, the black or yellow wash, or others of the same description, after it is not necessary to interfere at all, nature speedily effecting cicatrization. *

Constitutional treatment. Mercury seems to possess a powerful controlling influence over the chancre, and under its use, the sore speedily cicatrizes, but the power of this agent for evil when used improperly, as well as for good when judiciously employed, should be kept in mind. Syphilis is itself one of most powerfully depressing diseases, with

Treatment of Chancre and Complications

which may be late in appearing, and although mercury may cause the rapid disappearance of the sore, it behoves us to consider what will be the condition of our patient a month, a year or 20 years in the future. Nothing therefore should be done which will place him in a worse position for resisting the ravages of the disease, than he would be in, if no treatment had been instituted. Surg. Dr Bumstead, "It is a fact attested by many observers, that those cases ultimately do best, in which specific treatment is deferred until the secondary stage." * This is high authority against the use of mercury in the first stage. Dr Robert McDonnell, Prof of Surgery in the Royal College of Dublin, remarked in a lecture delivered in that University in the year

part of this lesion, that "mercury actually cuts a slice out of a man's life", and he deprecates the use of it at any stage. But are there no circumstances under which the drug may be used? I think there are. When a chancre from its size, depth, progress, or position threatens to destroy important parts, or occasions pain or great inconvenience; in men and persons to whom rapid cicatrization is of the greatest importance, the judicious use of mercury is very valuable. The Bichloride, dose 1/12 to 1/6 grain in doses of 1/10 2 or 3 times a day may be given. What then should be done when a patient having a chancre presents himself for treatment? If he is of robust frame and healthy constitution, and can be forwarded if need, the treatment may be carried out with [illegible]

[illegible] of the secondary symptoms, if anxious and unwilling to wait, some placebo may be prescribed. But if the patient is pale and anaemic, with a constitution shattered by disease or abuse tonics must be employed to prepare him for the long and distressing disease. In these cases Iron in some form should be employed. The Tr of the Chloride is probably the best remedy. It may be given in combination with Quinine or bark in some form, or any of the bitter tonics may be used. Cod liver oil is often of great value in sustaining the vital powers of the system. The hygienic management, in the greatest importance. The best and most nutritious food should be used. good clothing and protection from the vicissitudes of the weather. Mental hygiene should be [illegible]

The patient should not be allowed to brood over his disease, and although he should not be encouraged to expect his entire recovery, yet his imagination should not allowed to dwell upon evils which are the result of overwrought minds.

Finis ~

Randolph Winslow AB

Jan 7th 1873

University Hospital. Baltimore Md

UNIVERSITY

of

MARYLAND.

Thesis.

"Gunshot Injuries"

Baltimore Md
January 1st 1873.

Adolph G. Haeuw.

"Gunshot Wounds"

Gunshot injuries are not that develops much contusion, extensive laceration and the entire death of the parts or tissues upon the immediate track of the missile. They are always followed by the highest degree of inflammation, leading to the destruction of tissues in or around the wound from extensive sloughing and suppuration.

Nervous shock is always more or less developed; according to the nature and severity of the wound; thus if a large joint be opened as the knee) nervous shock will be very great, even so much so that it may prove fatal at once by throwing the patient into such depression that the patient be unable

be aroused from it. Severity of shock is often indicative of the amount of injury inflicted, and therefore plays an important part in the diagnosis.

Haemorrhage is very seldom a primitive symptom of gunshot injuries, excepting where the artery injured be a very large one as the aorta or iliac, in which case bleeding would be as extensive and fatal as if those vessels had been divided by the knife.

The arteries very often escape injury, even when they are directly in the immediate track of the missile; this may be accounted for by their elasticity and their mobility -

having a tendency to roll from under the finger. Often though one attempts to turn across it will not bleed owing to the peculiar structure of the vessel, the two inner coats retracting and the outer coat bursting upon itself thus forming a most effectual barrier to haemorrhage.

Pain is not a very prominent symptom unless in some instances where large osseous structures have been perforated. Some wounds, in which only the soft parts are implicated as a rule of the muscles of the hand, are sometimes not even felt, and this is especially the case when the mind is in a passion or in a high state of excitement

a statement, is not conscious even of the injury until he is told of it or feels the trickling of blood upon the skin.

Characters of gunshot injuries.

Severe injury may result from the discharge of a musket alone; as the firing of a piece, with the muzzle a few feet from the body, producing concussion of some important organ; thus the liver might be extensively lacerated or fissured, and this even without any external wound, or account of a extreme brittleness of the ribs may be divided within the mouth, leaving out the cheek, or driving the bones of the base of the cranium

into the substance of the brain, causing spiculi to pierce and bring about serious injury to this most important organ. The discoloration which results from explosion of the gun is in itself a very ugly effect, leaving a livid or black discoloration of the skin often with white, livid spots between the blotches, which make it exceedingly ugly to look upon.

Pieces of clothing, wadding or a button are often carried into the wound, and these should always be sought and promptly removed, as they prove great sources of irritation and extensive suppuration.

Bird-shot produces some of the most

frightful of this class of wounds; especially if the distance between the part struck and weapon be very short, as 3 or 4 feet. In this instance shattering or almost a contact ~~wounds~~, tearing and lacerating the soft tissues and splintering the osseous structures; ~~wounds~~ and arteries cannot escape injury, as where a single projectile as a bullet which might just thereinto. At a greater distance when the shot have had time to separate their effect is not so severe and produce less serious injury; their velocity having been decreased in the distance they may merely edge under the skin or may penetrate the arterial tissue from both of which structures they may be

cut out, or as is often the case they will plough away. Sometimes this fine shot is productive of very serious mischief, as, penetration of the eyeball, destroying vision; or it may pass on further piercing the thin orbital plate of bone and enter the substance of the brain. If it happen to enter a large vein it may give rise to extensive phlebitis which will generally prove fatal. The wound of an artery by one of these shot may occasion that serious disease viz: Traumatic Aneurism. Portions of shell, splinters of wood, gravel &c, inflict some of the serious gunshot injuries; combining laceration contusion and severe haemorrhage in their effects.

As these missiles take on the character of cutting instruments, from their irregular sharp edges, if they sever an artery it will bleed with the same tenor as if divided by the Knife.

Bullets of various Kinds are the projectiles which accasion some of the most dangerous wounds under this category, and are those most commonly met with. The introduction of the rifled weapons, into use, render the injuries from these weapons exceedingly dangerous. Inasmuch, that the bullets fired from this class of arms, acquire an increased velocity, and hence and increased violence, and also a rotatory motion, they are not deflected from their course as

the old round ball fired from a smooth bore. If a bone be struck by a conical bullet fired from a rifled gun, it is very apt to suffer the most severe shattering and splintering, and often a fissure extending the length of the axis of the bone. Shock from this class of bullets is always more severe than from any other projectile. As a general rule, if a bullet be moving at the height of its speed, it leaves two apertures, one of entrance and of exit. If it be spent it may lodge in the soft parts of the body or it may imbed itself in the osseous structures. Three or four apertures should not always be looked upon as indicative of the number of missiles having

passed in or out of the body, as a bullet-
may (split) in two pieces by striking upon
the sharp edge of a bone, and thus leav-
ing two widely seperated wounds which
would be very apt to mislead the sur-
geon. Where one aperture exists it may gen-
erally be inferred that the foreign body has
lodged in the wound; though sometimes
it may strike, having been spent, some
elastic structure and rebounding, drop
out of the entrance wound; or it may
carry in with it some of the clothing,
forming a sort of sack, so that when
this (clothing) is removed the bullet will
come away with it: therefore the exam-
ination of a patients wearing apparel
is of great diagnostic value, for

if the clothing be intact, it at once proves that the foreign body has not entered or rather lodged in the body, and "vice versa". Conical rifle balls are the most dangerous in their effect as they are not deflected, and will pass through the densest and hardest osseous structures. The position of the bullet, if it lodge, is not always to be inferred from its point of entrance, as it may traverse under the skin, or along the axis of a bone, and thus fix itself in a position quite out of the line of entrance. Position or attitude of the patient, when shot, is also of great importance; the contraction and relaxation of muscles, will make it utterly impossible to probe a wound

unless the individual be placed in the same position that he had at the reception of the wound.

The aperture of exit is the one generally larger than that of entrance.

It certainly is larger in the wound from a rifle ball, as this projectile moves through the parts, with a rotatory motion and as its entrance is one of simply piercing the skin, its passage through the parts and exit is one of extreme laceration, on account of the ragged ends which the bullet receives from the grooved character of the rifle. now, as the bullet does not loose its rotatory motion, it follows that these sharp and ragged edges of the missile

will tear and twist a certain amount of tissues along with it, and carrying them out at its exit will leave this (exit) considerably larger. At the end of a few days the slough which appears at the entrance wound, will make this look larger than the exit.

Cannon balls often tear away entire limbs; or may pass directly through the body severing it in two; or by striking the head, smashing it, thus leaving a gastly spectacle. Sometimes the skin is not broken, and yet there is serious mischief inflicted by the rolling of a heavy shot over the trunk, demolishing the liver contusing the Kidneys or rupturing some of the important hollow viscera. It may

in this way, destroy the important vessels nerves and entirely crunch up the bone or bones of an extremity, ~~gan~~ gangrene being the result.

Treatment.

The first thing to be done is to arrest haimorrhage; if this be of a venous character, water dressing a piece of wet lint or sponge will often answer. This purpose; if it be arterial ligation of the vessel above and below the injury will be necessary, as the collateral circulation will carry it out of the lower extremity.

If haemorrhage have occurred, and have (ceased) spontaneously, never meddle with it for the chances are that it will

not bleed again; but on the contrary if it should bleed again, it is a rule to ligate the vessels independant whether this haemorrhage is going on at the time of arrival of the surgeon or not. Partial severing of an artery will persist in bleeding, as in this case the inner coats having a chance to retract upon themselves and cause gaping of the wounded vessel and thus enhance the bleeding. As a general rule small arteries cease bleeding spontaneously, and even the larger ones, on account of the character of the wound. If the wound do not admit the ready application of ligature, it should be enlarged, which is justifiable.

Shock should be counteracted by stimulants such as brandy and a little Sp. Ammon. mix together; overstimulation should be avoided as it increases the intensity of the reaction and inflammatory degree. Opium, in the shape of the tincture, or one of its salts should be given if pain be very great.

Removal of foreign bodies should be commenced as soon after the accident as possible; a thorough examination of the wound should be made; the clothing should also be examined to see that this is proof of perforation of shot or not. The index finger should be used for probing, it being the

most natural and intelligent.

Probing instruments should be used under no condition excepting very rare instances; as the use of a Nelaton probe may be very necessary in establishing a diagnosis of the position of a bullet. If the index finger ~~for~~ is to large for probing the little one may be used, and there are few bullet wounds this will not go into. Whilst probing, the position of the patient was in before the reception of the wound, should be borne (in mind) as it is valuable in diagnosis.

Extraction of foreign bodies.

There are various instruments in use

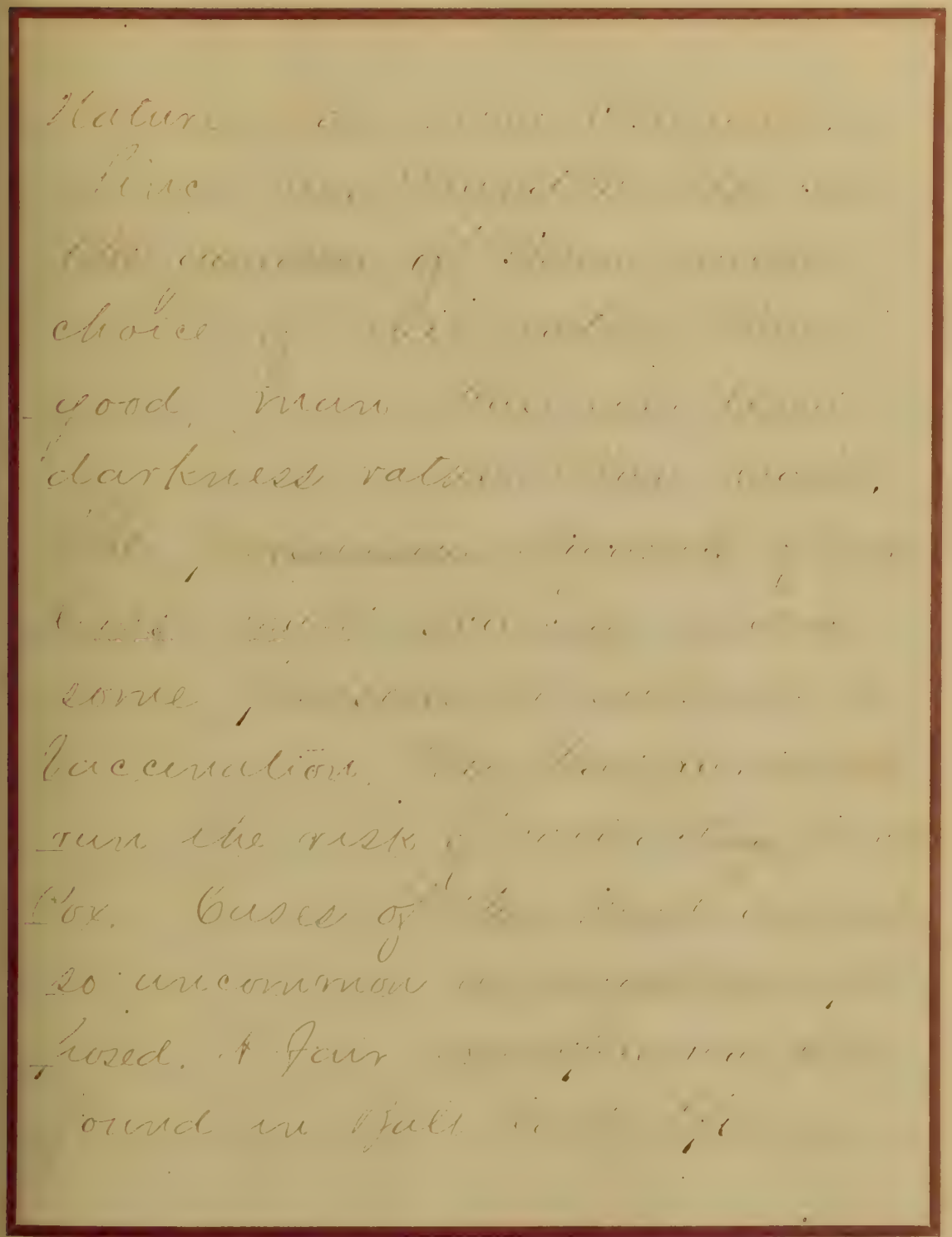
for the tumor, and the last is what is called a hook-splinter forceps. It does not cause any tension in the wound when introduced and thus saves a great deal of pain.

Vaccinia or Cow Pox, a disease
which I believe to be the
Variola or "Small Pox" Inoculated

exanthine disease occurring in
cattle but may be propagated
by means of
ance upon the surface
of the
cable Both by the simple contact
of
Scab When transmitted
the cow to man it produces
comparatively harmless disease
characterized by no
the first few days
third day after vaccination
examination commences a

forms undivided and
later. On the fourth
day they assume
and the cuticle is
transparent thin liquid.
gradually increase
assume an umbilicated fir.

5th The vesicles attain
1/8 of an inch in diameter.
The vesicles resemble those



[illegible] legislation [illegible]
[illegible] juris[illegible]
[illegible] [illegible]
discussion [illegible] [illegible]
[illegible] [illegible] to the study of
Medico-Legal Insanity.

It is admitted [illegible]
is a prevalence of [illegible]
It would, proper[illegible]
[illegible] the result [illegible]
[illegible] afforded
different according to
idiosyncrasies. Some have
thought that [illegible]

should be practiced
every three or
an interval of
more is allowable,
is that the
record where vacci
practiced and
been insusceptible to Small
Pox though time and again
years. Hence it would be

fourth year or whenever an epidemic prevails regardless of previous vaccinations. Very rarely when Revaccination is practiced it fails to produce vaccinia the first time and of two a second or third. In such cases the Physician should Revaccinate until it proves successful or he has assurance that the patient is insusceptible.

In those cases where vaccinia is not a protection against Small Pox constitutional

the intensity of symp-
toms in proportion to the re-
cency of vaccination
The subsequent Vaccinia
produced at differs from the
in the respect,
vesicular, pustular and desiccation
rapidly, so that the whole
period of the disease is shor-
ter since the first Vaccination th
second
and "vice versa" &c &c

[illegible] produces
be due
to insusceptibility [illegible]
A proper discrimination must
drawn. Some individuals take
vaccina with great difficulty
on this account fair trial should
be made. Undue precaution
[illegible]
vation of the Physician and in-
flict life long mortification upon
the patient.

The first year of life has
been assigned as the proper time
when Vaccination should

be practiced
persons are
contagious diseases it must be discon-
ued longer. Not so in the City where
Epidemics are so prevalent. Vaccin
as the second or third month this
duty should be performed.
The objections to so early an age
the great danger of communicating
of the Virus too great care ca
exercised Much misery and
by neglect on the part of the
Physician, in the use of Virus

Taken from syphilitic persons

The virus should always be selected from a healthy subject. A healthy country child should [illegible] the virus, the lymph or crusts may be used. The lymph is preferable if fresh. When the lymph is used it should be extracted from the vesicle on the fifth or sixth day. It [illegible] at once by transferring it on to virus, as thus it is capable it may be [illegible]

[illegible]

[illegible]

[illegible]

Inaugural Thesis

for

Degree of Doctor in Medicine,

submitted to

The Regents, Faculty of Physic
and Provost

of the

University of Maryland,

by

J. Gheston Worthington
of Howard County Md.

at the close of the Session of 1872-73.

Degeneratio Cordis Adiposa
or
Fatty Degeneration of the Heart

Introduction

Occurring in any vital organ Fatty Degeneration is a most alarming affection; but especially when it occurs as it so often does in the heart, for as is the case with cancer, that which it has distroyed cannot be restored So that however far we may advance in the pathology of the disease, in the treatment we may never get beyond preventive measures, that is either to prevent the occurrence of the disease, or when it has occurred to prevent

its progress, and to palliate those symptoms to which it gives rise.

History —— While the Microscope was considered as a plaything, and only fit to amuse the zoölogist or botanist, and unworthy the regard of the practical man of science, the true nature of this, as of other conditions, normal and abnormal, could not be understood; but was confounded with simple accumulation of fat upon the external part of the heart or between its fibres. Laennec was the first to discribe distinctly the two conditions, Fatty Accumulation & Fatty Degeneration. And the microscopical researches of Williams, Vogel, Rokitansky, Rouin & Barlow have

verified the distinction which Laennec first pointed out, and besides have enabled us to study the change very much more accurately.
But the question: Is the fat deposited in the substance of the muscle within the sarcolemma or is it formed from the myoline itself? is still sub judice.
Fatty Degeneration is observed to occur in abnormal growths, probably on account of defective circulation; this has often been seen in cancers which are in some instances completely distroyed by it. Tubercles also undergo the same change in many cases. In pathological conditions like the above the change is highly

useful; as it is in at least one physiological condition where it constantly occurs, viz. the involution of the uterus after parturation, in which case the muscular fibres of the uterus which have formed during gestation undergo fatty degeneration, are absorbed, and an entirely new organ formed.
Nature— The appearance of fatty degenerated muscle is compared by Laennec to dead leaves; being a pale fawn color with a yellowish cast. Sometimes the change has taken place only in patches giving the muscle a mottled appearance. This may be so slight as to be scarcely perceptable, but the same author observed that even in these cases the muscular

fibre would impart a greasy stain to paper. Rokitansky, in his "Manual of Pathological Anat." thus discribes the change as it occurs in muscular tissue. "The earliest change is one of color. The muscle is of a pale reddish color & is found to on close inspection, to be not uniformly discolored, but stained irregularly of a yellowish fawn color, as well as marked with longitudinal pale reddish streaks which follow the course of the fibres. As the stains of fat increase in size & coälesce, the muscle acquires an almost uniform fawn color, but its fibrous arrangement still remains distinct. With the advance of the disease it becomes altogether

of the color of fat * * * No trace of its fibrous structure remains except some of its tendons or the cellular sheathes of the faciculi. Up to this stage of the disease the outline of the muscle has been preserved; but in the last stage the mass of fat into which the muscle is changed, mixes with the adipose structures around it."

Under the Microscope - the most striking change is the absense of the transverse strix. This is caused by the distruction of the cells that had contained or constituted the myeline; & the appearance in their place of bright oil globules irregularly disposed within & without the sarcolemma.

Causation, Vital and Chemical Nature-
The causes which seem influencial in producing this change are, either imperfect assimilation from a want of proper vital force in the part diseased or rather the nerves supplying it; or, from an abnormal amount of fat in the circulation. When the change occurs as the result of insufficient exercise in a part, it may be looked upon as a physiological process instituted for the distruction of useless matter, though Nature may, as it were, in this case treat a part as useless only because not used. And thus, though necessary to life, the hypertrophied heart may be destroyed

by fatty degeneration in consequence of their not being work ~~work~~ enough, from any cause, for its too powerful muscles to do.

"* Dr. Quain, who regards the change as a conversion of elements, attributes the affection to impaired nutrition frequently dependent on coëxisting obstruction of the coronary arteries. Of eighty-three cases analysed by him these ~~ar~~teries were ossified or obstructed in twenty-five. Rokitansky having often observed it in connection with pericarditis & endo-carditis, thinks it may occur as a sequel of these affections."

On account of the demminished force of the dilated heart it is apt

* Flint on Dis. of the Heart. page 94.

to become fattily degenerated. But it is more remarkable that the simply hypertrophied heart is liable to the change. Indeed it seems impossible that it should occur in this case from want of exercise of the muscles so long as the condition which demanded their extraordinary exertion exists, which has given rise to a state of hypertrophy bearing a direct proportion to the amount of resistance required to be overcome in order to carry on the circulation under the embarrassed circumstances. Now when the impediment to the circulation is a valve lesion which is incurable, the impediment always existing,

the necessity for exertion will remain, and the heart accordingly cannot undergo fatty degeneration until having attained the greatest degree of hypertrophy it becomes dilated, as it will if the patient live long enough, when it may become fattily degenerated. But if any incurable lesion of the heart causes it to become hypertrophied, and this condition is aggravated by very violent muscular exercise, if this exercise be suddenly stopped, the heart being eased of half its work would be liable to become degenerated from want of sufficient exercise.

Occurring as I believe the change

most often does, in consequence of a great tendency to the absorption of fat, causing obesity, it is oftener to be credited to alcohol than to any other cause. This it seems to accomplish by increasing the ability of the intestinal absorbents or lacteals to absorb fat from the food, and possibly by being itself converted into fat, as sugar and starch are converted. This tendency of alcohol to cause fatty accumulation and degeneration accords well with its usefulness in Tuberculosis, which seems to be a condition diametrically opposit to fatty degeneration, for if in Tuberculosis we can secure the absorption of fat by giving Cod liver-oil, alcohol, tonics &c.

we have accomplished all that we can hope to. The fatty degeneration of the liver so common in connection with tubercle in the lungs would seem to contradict the above statement; but does it not seem probable that any condition of this organ interfering with the due supply of bile -- which, as was proved by the experiments of Bidder & Schmidt, is the great natural tonic or promotor of absorption -- is it not almost certain that any such interferance with alimentation would cause Tuberculosis? Gluttony combined with idleness is a very frequent cause of this disease. Age is an important predisposing cause, it generally does not occur

until after the middle age, the tendency increasing as age advances.
As we have stated above the disease is apt to occur in persons affected with obesity, in which cases the affection seems to depend on an abnormal tendency to the deposition of fat.
From this supposition is derived the theory held by Rokitansky, Jones Sieveking and others who contend that every case of what is called fatty degeneration is merely an instance of substitution of fat for the normal elements of the part; and that it is impossible for a nitrogenized substance like muscle, to become a non-nitrogenized substance as adipocere. But this

change, it is thought, has been proved to be possible, for Quain produced a change of muscular fibres into adipocere by macerating them in dilute alcohol and Nitric acid. In proof of the same Dr. Ely says, in an article on Fatty degeneration in the Am. Jour. of Med. Jan. 1854- "Numerous instances are on record of the conversion of the human body into adipocere. In one of the burial grounds in Paris fifteen hundred bodies were interred in one pit; most of them by the action of water were converted into adipocere. Under favoring circumstances the same thing has been noticed in the vaults of dissecting

rooms." Which all goes to prove that the change may take place in the living tissue, as from insufficient innervation & nutrition. But when it occurs with a tendency to obesity it is likely that the fat is substituted for the oxygoline. In regard to the difference between fatty accumulation and fatty degeneration Dr. Stokes says (Dis. of Heart & Aorta p 303) "Can we in the present state of our knowledge declair that a strong line of demarkation exists between these two forms? I apprehend not, and think that at least the first form may include the last."

"The variety of fatty degeneration known

as atheroma or pulpy degeneration, is only an infiltration beneath the lining membrane of the heart and arteries, of fatty matter mixed with cholesterine crystals and earthy salts. When atheromatous degeneration causes thinning or rupture of a heart valve or an arterial wall, it is by its direct pressure exerted upon the substance of the part by the atheromatous deposit, causing absorption just as any other foreign body can cause the absorption of a part by constant pressure upon it.

Symptoms— The Symptoms of Fatty Degeneration of the Heart as of all other local diseases, are

divided into local and general.
The general symptoms or rather
remote symptoms are of at least
as much value here, as the local,
indeed the physical signs are
probably of less value in this than
in any other disease of the heart.
The pulse is weakened, but this is a
very uncertain symptom. "Notable
slowness of the pulse" says Prof. Flint
"has been observed, the number of
pulsations per minute falling
to twenty or thirty and even much
lower, in some cases they have been
as low as eight or nine per minute.
Dr. Bellingham remarks with
reason that this uncommon
slowness of the pulse involves an

abnormal cerebral condition superadded to the heart affection." Intermittency and irregularity of the pulse are also noticed; but none of these symptoms taken seperately is pathognomonic of the disease, And indeed they all may occur together or seperately in dilatation without fatty degeneration of the heart; In short they merely indicate great weakness of the contractions. Dr. Flint mentions in this category; sense of oppression at the præcordia, palpatation, a tendency to syncopè and capillary congestion of the extremities; and if the right ventrical be involved, dyspnoea on exercise on account of

the pulmonary congestion caused by that condition. Among the remote effects of the disease is the occurrance of attacks resembling apoplexy, but not followed by paralysis. Although good authorities state that when these attacks prove fatal no lesion of the disease is found in the brain, yet there must have been some cause for these attacks either the condition of the circulation as influenced by the diseased heart, or a similar condition ~~to~~ that of the heart in the cerebral arteries. It is not probable that these attacks depend merely on the weakness of the circulation; for if this were the case why do they not occur just as often in con-

nection with dilatation without fatty degeneration?

That the condition of the system which leads to the disease under consideration also gives rise to the arcus senilis is not to be doubted, but that fatty degeneration of an organ remote and of an entirely different structure: the cornea, should be a sure proof of the same condition in the heart especially or of some other of the viscera, as was asserted by Canton, does not seem at all reasonable, and in fact has not been supported by the experience of later observers. However, occurring with other symptoms it should assist in directing our attention to the

disease under consideration.
Obesity of course with any of the above symptoms would lead us to look for fatty degeneration of, or accumulation on the heart, of which latter condition the symptoms referable directly to weakened action of the heart are very much the same as of the former.
Another symptom of the disease referable to the cerebral disturbance, which was first referred to fatty degeneration of the heart by Dr. Stokes, who considered it as characteristic of great weakness of the heart. He says* "It consists in the occurrence of a series of inspirations increasing to a maximum and

* Stokes on Dis. of Heart and Aorta.

then declining in force and length until a state of apparent apnœa is established. In this condition the patient may remain for such a time as to make his attendants believe him to be dead, when a low inspiration followed by one more decided marks the commencement of a new ascending and then descending series of inspirations. This symptom as occurring in its highest degree I have only seen during a few weeks previous to the death of the patient."

Angina pectoris is liable to occur with this as with other diseases of the heart.

There is no cardiac murmur referable to this condition, and all the Physical signs are rather of a negative than positive nature.

When the disease is not complecated the absense of increased dullness on percussion over the superficial cardiac regeon, there being at the same time weakness of the hearts action, distinguishes the disease from dilatation of the heart. The sounds of the heart will be weakened, especially the first; sometimes it will be entirely wanting; and in some very far advanced cases both are wanting.

With the above signs and predis-

posing causes the diagnosis is almost certain. But the disease has of course always advanced to a considerable extent before any of these symptoms appear; and persons often die of other diseases whose hearts are found on post mortem examination to be more or less fattily degenerated. This condition of the heart makes the system very liable to be greatly reduced by any slight disease and very intolerant of bloodletting. Sometimes in Typhus and Typhoid fevers we have softening of the heart-walls similar to the fatty change in effects and giving rise to the same symptoms

of weakness of the hearts action.

Prognosis.— This will be serious in proportion to the rapidity of the advance of the disease. But the danger of a fatal issue depends to a great extent on the supervention of other diseases, which it influences very seriously for the worse. Existing to a considerable extent it involves liability to sudden death from rupture of the heart: literal heart-break; which was the cause of death in nine out of twenty-nine cases of sudden death in persons affected with fatty degeneration of the heart, analysed by Dr. Aitkin. This rupturing of

the heart has been known to oc
cur from mental causes both
of joy and sorrow; and is proba
bly the cause of death occurring
suddenly on the receipt of some
very startling news. But, contry
to popular sentiment, a bro
ken heart is more frequently
the result of physical causes than
of mental emotions. And
great bodily exertion by a pa
tient whose heart is far advanced
in the change, may cause this
accident. Indeed I have read
of a case where a man broke
his heart by his desperate but
vain efforts to draw on a tight
boot! Even in the lower an-

imals, which are often, the domestic at least, affected with fatty degeneration of the heart; rupture of the heart under great exertion is a not very infrequent cause of death. especially in horses. When sudden death takes place in this disease without rupture of the heart, it is generally owing to accumulation of blood in the cavities of the heart to so great an extent as to cause paralysis of its muscles. If sudden death do not occur from either of these causes, and if no intercurrent disease be rendered fatal by the condition of the heart; the patient may live for a long time and in a

very comfortable state of health, even though the disease may have made considerable progress.

Treatment — In the consideration of all diseases the Treatment is the most important item; for it is the end to which all our observation aims, or should aim. For Pathology is only the servent and guide of Treatment. The indications are to prevent further change and to strengthen the weakened organ, so as that if possible the fibres which remain intact, may be enabled to do the work of the perfect organ; And also so to reduce the work of the

heart as to compensate for the weakened state of the performer. The treatment is about the same for fatty accumulation as for true fatty degeneration or substitution; but the success will be far different.
The first disease may be entirely removed by, mostly such dietic treatment as tends to reduce obesity. Dietic treatment may also accomplish much in the third condition -- Fatty Substitution or degeneration occurring in patients having a tendency to obesity. And although this treatment can not restore the lost fibres, yet it can prevent

the further deposit of fat; and by making the diet as nutritious as possible we can promote the deposit of myoline to take the place of that which is naturally absorbed, which would under a fattening diet have been supplied by fat. And in all cases of fatty substitution, there exists in combination with it, fatty deposit on the surface of the heart and between its fibres; which may be removed under this treatment and thus allow the heart to move freely.

When true Fatty Degeneration of the heart has occurred, this anti-adipose dietic treatment

can do no good, and most likely
harm, by the depressing effect that
such a treatment might have
on the mind, as any prolonged
depressing influence on the mind
tends to produce fatty degen-
eration of the heart probably by
calling off, as it were, the atten-
tion of the vital force from nu-
trition.

Exercise is an other important
part of the treatment, especially
when it can be made to com-
bine entertainment for the mind
with the bodily exercise. It should
be restricted within proper limits,
requiring a decided increase of
the heart's action; but should

never be violent enough to give rise to any unpleasant effect, such as palpitation, precordial oppression, or dyspnoea.

But to return to diet. Dr. Flint recommends that "The diet should be nutritious consisting of animal food in as large proportion as is compatable with the appetite & digestion. Fatty food is to be interdicted" and I think that the meat of highly fatted animals would be rejected as in this case the muscular fibre have often undergone the fatty degeneration. Such vegitable substances as contain the least starch should the most

purely used, as the various cruciferæ. The gluten bread used for diabetic patients would be useful here. Sugar, as well as starch and fat, should be withheld from the diet. "Liquids should be restricted as much as possible," in order, by diminishing the volume of the blood, to enable the heart to perform its function more easily in its weakened state, and to render it less liable to dilatation or rupture.

Though the surgical, and especially the dietic treatment are of the greatest importance, yet some considerable benefit may be derived from

medicines. Of these tonics are useful auxiliaries to the dietic treatment. Other remidies are to be used according to the expectant plan of treatment. For the pseudo apoplectic attacks etherial and alcoholic stimulants; the same for Syncope. Irregular action of the heart should be controled by Hydrocyanic acid, Digitalis and Veratrum viride. Other intercurrent affections should generally be treated as when they occur uncombined. And great pains should be taken to prevent the intercurrence

of any disease which may in any way weaken the system. In conclusion I will again quote from Dr. Flints able work on diseases of the heart "By judicious management, life and comfortable health may be preserved for a long period notwithstanding the existence of the lesion to a considerable amount"

J. Cheston Worthington

An

Inaugural Dissertation

On

Acute Dysentery

Submitted to the Examination

of the

Provost Regents and Faculty of Physic

of the

University of Maryland

for the

Degree of Doctor of Medicine

by

Hiram Jones

Delaware 1875

Farrell Co.

[illegible]

Whereas it has been
the custom from time immemorial
for a Student for graduation to
write a thesis or essay on some sub-
ject pertaining to medical or sur-
gical composition, it falls upon us
as a duty to comply with the
requisitions, and in doing so I would
most respectfully present to you, for
your consideration and inspection
the following [illegible]

[illegible]

stools are afterwards mixed with
mucus and blood. The bladder
and [illegible] in some cases
[illegible] with the rectum, causing
a constant desire to [illegible]
and attended sometimes with difficulty
in the tenderness extends high
up and along the right side
we have reason to believe that
the inflammation has traversed
along the transverse colon and
has caused the [illegible]
[illegible] in some cases mucus
and bile, and in others but
little mucus, but this is in
accordance with the febrile phenomena.

[illegible] may be but [illegible]
[illegible] pulse and fever will [illegible]
[illegible] ases it adds to the danger of
[illegible] disease. The skin may be
[illegible] or cold, as the fever predominates,
[illegible] intellect is usually unaffected.
[illegible] there is high fever and
[illegible] The [illegible]
[illegible]
[illegible] length varies in different
[illegible], according to the extent of
[illegible] organs affected, and
[illegible] condition of the patient
[illegible] affected.

Consul[illegible].

There are many [illegible]
attributable to [illegible]
predisposition is [illegible]
the continued influence of [illegible]
We are here the affections [illegible]
[illegible] in warm climates,
[illegible] in cold regions, but it is
much less frequent and of less
[illegible]; It is especially apt
[illegible] to [illegible] dis-
eases proceeding or accompanied
[illegible] the so called fevers.
It is much more prevalent
during [illegible] and
[illegible] months. Substances

[illegible] irritation [illegible]
[illegible] on the alimentary canal.
[illegible] as undigestible food, acting
as a source of irritation.
[illegible] of bowels [illegible]
[illegible] in a manner explained [illegible]
[illegible] dysentery are not simple
[illegible] acute form is contagious
[illegible] have no proof, but whenever
[illegible] associated with some of the
[illegible] fluid fevers which is contag-
[illegible] and in this way the
disease may be produced
[illegible]
[illegible] is entirely [illegible]
[illegible] only disease that it [illegible]

administration of drugs which will
control the disease. Cathartics
in cases [illegible] the cord affects
the [illegible] must
not be denied. It is desirable
as early as possible that the fecal
matter of the large intestine
should be removed [illegible]
and secure rest. [illegible]
necessary to discriminate
between the [illegible]
and [illegible]

of the milder purgatives
is given in sufficient dose to
cause a free evacuation,
of diarrhœa it is
sometimes sufficient
to remove the cause of the obstruction
may be used with advantage such
as Mistake of Iron Rhemania Rhei

milk and beef tea &c. should
mental powers begin to fail
[illegible] be
[illegible]. [illegible]
include the outbreak of acute
disease. Hoping that a
will meet with [illegible]
Respectfully submitted to the family
[illegible]
Coroner.

Thesis

on

Diphtheria

by

Richard Gerstell

Session 1872-73

Diphtheria.

As a student I have nothing new nor interesting to offer to the Faculty; but as writing a thesis is a duty I must comply with it. I had taken as my subject the pathology of tubercle but as my ideas of this disease are somewhat different to those of some of my learned teachers I have taken another subject— namely Diphtheria. One which is not quite as interesting to myself, but none the less important and I beg you will excuse me if in treating of the disease I err from those general truths which of late have been so fully described by writers upon this subject.

History.

Not a great many years ago this was

spoken of as a new disease but this seems to have been caused by the discrepancy existing as to the mere name of the disease. It is thought that the disease can be followed back to a period beyond the time of Hippocrates; but there is little doubt that Aretaeus, who lived in the second century of the Christian era, described this same disease under the name of malum Egyptiacum. Still later writers described it under the various names of angina maligna; angina gangrenosa; cynanche maligna; angina suffocativa; putrid sore-throat and epidemic croup.

Bard of New York, was the first to call

attention to the disease in this country. About the year 1789, under the name of angina suffocativa. But it remained for Bretonneau in 1826 to describe it under the name of diphtherit from which the name diphtheria is derived.

Nature

Perhaps in no disease has there been a greater discrepancy as to its true nature than diphtheria. Some contending that it is a local disease and others that it is constitutional. Thus Bretonneau says that it is truly local the constitution becoming affected from trouble produced in loco. Others arguing in the same way claiming that the constitutional symptoms arise

from the absorption of the morbid material deposited in the throat. But I hardly think any one at the present day would hold such views. If it was a local affection then that should be one of its first manifestations; but this is not always the case, for we have those prodromic symptoms which precede almost all constitutional diseases affecting the system before we find any deposit in the throat. If it was a local disease it is hardly probable that we would have such constitutional disturbances as albuminuria, the formation of pseudo-membranes upon upon almost all mucous membranes and on the denuded skin; also its epidemic and contagious character.

Causation

I suppose there is scarcely an author, of any note, at the present day who would deny the epidemic nature of the disease but as to its true contagiousness there still exists some doubt. Niemeyer says that epidemic diphtheria belongs to that class of diseases which, are infectious and to use his own language typically contagious. The contagious matter residing in the false membrane and in the exhibations from the lungs. I think he goes too far when he says that it is a truly contagious disease for if this was the case many more physicians and attendants of the patient would suffer from the disease than really do.

It is said that Trousseau applied a portion of the pseudo-membrane to his own throat without contracting the disease, but numerous examples can be sited where by some accident this membrane has been thrown upon a mucous surface and soon after the patient was seized with the disease. Be this as it may we should consider it as contagious and keep the patient suffering with it secluded as much as possible from the rest of the family.

Telluric and hygienic conditions appear to have little or no influence upon the disease occuring as well in one season of the year as in another in thinly populated towns of a mountainious region

as in crowded cities of low and damp situations and among the rich as the poor. Statistics seem to show that sex has no influence upon the frequency of the disease.

Age. Niemeyer thinks that the greater frequency of the disease among children is not caused by their greater susceptibility to it but simply because they are more exposed to infection than adults. This may be true but Flint denies it saying that children between three and twelve years of age are most susceptible to the disease.

Pathology.

One of the most constant morbid conditions

is the formation of pseudo-membranes. Now the origin of this membrane has given us so little interest. I had the opportunity a few days ago to read one of Virchow's lectures on the origin of lymph and fibrine In reading most works on the formation of this false membrane they speak of it as an exudation from the blood, but Virchow claims, that when fibrin is thrown out upon a surface it is not an exudation from the blood, but is formed in loco. He says that lymph is formed by the tissues and that it contains a substance closely allied to fibrin, but differing from it in not being as easily coagulated and that this substance

is converted into fibrin by coming in contact with atmospheric air. He says that by some irritant acting localy or through the blood there is an over-plus of lymph formed for the removal of which the lymphatic circulation did not suffice, and that the over abundant formation is thrown out upon the surface. Now, I have an idea, without much foundation perhaps, that this diphtheritic poison acting through the blood produced this very condition.

The most frequent seat for the deposit of this pseudo membrane is on the tonsils, soft palate and pharynx it sometimes extends into the posterior nares or into the larynx and

trachea producing that most formidable condition which we term diphtheritic croup. It is sometimes found upon all mucous membranes and upon portions of the skin from which the epidermis has been removed. This membrane examined by the microscope has been found to contain various parasites, such as the oidium albicans and the spores of leptothrix buccalis, but further researches have shown that they are only of an accidental occurrence, for in affections of the mouth such as thrush they are also found.

If the throat be examined before the pseudo-membrane is formed it will be found highly congested and of a

dark red collor. Some authors say that this is only superficial and that there is no ulceration beneath, but Niemeyer argues that the epudation is not only upon the surface, but that it is interstitial and this pressing upon the nutrient vessels occlude them and we have superficial gangreen of the mucous membrane. "If the larynx and trachea participate in the disease the croupous not the deptheritic form of inflamation of the mucous membrane occurs". Be this as it may the mucous membrane is always deprived of its epithelium.

Symptoms

Local. The local manifestations give us

scarcely any clew as to the danger of the disease. In some cases we may have an extensive exudation upon the fauces with very slight constitutional disturbance and again the most severe forms of the disease runs its course with very few local symptoms The patient may complain of scarcely any difficulty in swallowing but upon inspecting the throat after the second day we are very likely to find the tonsils and soft palate coverd with a pseudo-membrane. The cervical glands will also be found swolen and tender.
The disease may remain fixed in these parts during its whole course or it may extend into the posterior nares when the

patient may complain of a slight coriza with an acrid discharge from the nostrils. When the uper lip is reddened with swelling of the cervical glands during an epidemic of diptheria we may be almost certain that the patient has contracted the disease. According to most writers the invasion of the nares portends great danger most cases terminating fatally.

The disease may take another course affecting the larynx and trachea when we will have all the symptoms of true croup in addition to the great prostration of the system produced by the diptheritic poison.

General Symptoms

The invasion of the disease reminds one of that of true croup being as a general thing insignificant and attended with few symptoms that would warn us of the dangerous disease before us. Sometimes the disease is ushered in with a chill followed with a high fever the patient complaining of great lassitude and depression.

The pulse is generaly very frequent running as high as one hundred and twenty to one hundred and forty beats per minute. It is sometimes found to be irregular this condition of the pulse is generaly considered as an unfavorable omen.

In some cases there is complete anorexia, the patient refusing to take any food.

Vomiting is a frequent symptom. Diarrhea may also be present, and when discovered should excite alarm, as it is a very unfavorable symptom.

The breath is very offensive caused by the decomposition of the false membrane. In very malignant cases it is extremely so produced by gangrene of the mucous membrane of the fauces.

The brain is seldom much affected, the intelect remaining clear during the whole course of the disease. In some cases coma and convulsions are present; these symptoms may be caused by uraemic poison.

An almost constant morbid condition and one which is of vast importance in a

diagnostic point of view is swelling of the cervical glands.

One peculiarity of this disease is its great liability to numerous and dangerous sequelae, such as paralasis, albuminuria, heart-clot etc.

Paralasis. The first symptom that would call our attention to this condition is an alteration in the voice with difficulty of swallowing, the food regurgitating through the nostrils. The eyes are often afflicted from which the patient is unable to see distinctly. This condition seems to be due to the loss of the power of adjustment.

Next the lower extremities become involved the patient being unable to walk, and

at the same time there is impaired sensation.
The cause of paralysis is not certainly
known, it is thought to be due to the
diphtheritic poison acting on the nerve
centres. This condition follows mild as well
as severe cases.
Upon examining the urine it will generally
be found to contain albumen, we often
find tube-casts and renal epithelium.
Heart-clot. This dangerous accident
generally occurs late in the disease. The first
symptoms of this complication are pain in
the pericardial region, with lividity of the
face and coolness of the skin. The cause of
heart-clot is thought to be an over amount
of fibrin in the blood, or to a want of that

substance which holds the febrile in solution".

Diagnosis

There are a few diseases with which this may be confounded. Some have contended that it is identical with scarlet fever; but if the diseases are studied in detail, there will be found a wide difference. In scarlet fever there is almost always a distinct rash; where as in diphtheria such a condition is is rare; one attack of scarlet fever, as a general thing, protects the person from a second: one does not protect the system from the other, scarlet fever is a self limited disease, diphtheria is not.

From Croup. Croup is a disease almost

peculiar to childhood; diphtheria affects persons of all ages. In croup the cervical glands are not swollen; where as in diphtheria, they are always affected. In croup the pseudo-membrane is confined to the air passages, in diphtheria it is not. Croup is a sporadic disease; diphtheria an epidemic.

Prognosis. We should be very guarded as to giving a favorable prognosis; as the mildest cases are sometimes followed by the gravest sequels.

When the disease is limited to the pharynx and the patient put under proper treatment the disease, as a general thing, ends in recovery. When there is much prostration

with acrid discharges from the nostrils, hemorrhage, diarrhoea, etc. the prognosis is very unfavorable. When the disease extends into the larynx few cases recover.

We should never relinquish our efforts to save the patient, no matter how grave the symptoms may be; for sometimes cases of the most malignant character, end in recovery.

Treatment

We shall divide the treatment into general and local. Since the true nature of the disease is now better known than formerly, the local treatment is not of so vital an importance as it was when the idea prevailed that it was a local disease.

The local treatment consists in the application of astringents and caustics. When the disease has only existed for a short time Niemeyer recomends the careful removal of the pseudo-membrane and touching the mucous membrane with nitrate of silver, or concentrated muriatic acid

Trousseau strongly recomends the application of finely powered alum. A great many remidies have been recomended for the removal of the pseudo-membrane, among which are the caustic preparations of iron, which are said to act by causing the false membrane to shrivel, and in this way cause its removal. Lime water, seemes to be one of the most powerful solvents of this membrane;

this may be applied by means of the hand-ball atomizer. Carbolic acid diluted with glycerine is said to cause the separation of the membrane

If the disease extends into the larynx and there is difficulty of breathing we may give an emetic of alum, and afterwards apply such remedies as tannic acid and lime water by the atomizer. The latter remedies may be used in the same way where the disease extends into the posterior nares.

In the beginning of the disease when the throat is inflamed and swollen, there is often great relief afforded to the patient by allowing him to swallow small pieces of ice.

We should never use external irritants and blisters as they do no good and the ulcerations thus formed will soon be covered by a false membrane.

General treatment. Up to the present time there is no remedy which seems to act in any way as a specific against this disease, and as the general tendency of the disease is to destroy life by asthenia, nothing could be more rational than to avoid all depletory measures and the use of mercury, but on the other hand we should avail ourselves of every means we possess to sustain the patient, if possible, until the severity of the disease has passed. In order to carry out this idea the first

thing that would present itself to our minds would be the administration of nutricious food, upon which Professor Howard, our learned teacher upon this disease has laid so much stress. And I think he is right when he says we should abandon all other treatment if it interferes in any way with the due administration of proper food. We should give the patient such food as milk, eggs, beef-tea ite.

The therapeutical treatment consists in the administration of tonics such as quinine, iron, wine, etc. The iron should be given in full doses, as the disease has a great tendency to break down the blood,

the best preparation is the muriated tincture as it is said also to have a good local action. In severe forms of the disease the use of stimulants are of great service, they not only act by stimulating the nervous centres but in cases where the patient refuses to take nourishment they may be said to act, in an indirect way, as food.

We should give chlorate of potash alone or in combination with iron and quinine. If paralasis follow we may give strychnine with iron and quinine. Niemeyer puts more confidence in cold douches and sea-bathing than in any other remedies; he attributes little merit to electricity.

When the urine becomes scanty and heavily

loaded with albumen, we should make the patient drink large quantities of water and at the same time give tannic acid which is said to be of much service.

This remedy is said to be of use when the larynx is affected, it may be applied by the atomizer but in these cases we should not defer tracheotomy too late, although it is seldom successful.

And as in duty bound,

Respectfully,

Richard Gerstell.

General Treatment of Typhoid Fever.

J. W. Hunrichouse.

1873.

Theory of John Harley -

John Harley finds the basis of typhoid fever in the liver. The organ is placed as a filter, between the intestinal and general circulations. The typhoid poison passes to the liver, and is either discharged through the hepatic ducts, or it passes through the portal into the general system, or it remains in the liver. In the latter case there is diminution, or suppression of bile. This effect is produced by the action of the poison upon the portal nerves, or by the congestion which its irritant presence excites. In support of his theory, Harley observes the liver to be increased in weight, to be augmented in volume, more or less congested, redder than normal, and to be more or less advanced in fatty degeneration. The bile also he finds ———

diminished in amount, thin, watery, acid, and hardly showing its characteristic reaction with Heller's test.
The phenomena of typhoid fever, may be explained in accordance with this theory thus:- The constipation & anorexia of the early stages, produced by hepatic congestion. Tympanites, a result of decomposition of albuminose. Fetor of discharges, due also to same cause. Diarrhoea is nothing more than watery exudations from congested capillaries. The action of impurities upon congested mucous patches, causes ulcerations The ileum is most frequently involved, because it retains the impurities longer, and because the bile, scanty enough in the upper part of the intestine, is completely exhausted.

Views of Murchison.

The experiment of Claude Bernard on the sympathetic ganglia, furnishes Murchison with a theory of fever. The poison enters the blood, and paralyzes the sympathetic, and vagus nerves. In the one case, hyperaemia is produced, which hastens tissue change, and which change, becomes the cause of emaciation, and high temperature. In the other, results accelerated heart action. The languor, prostration, and occasional sudden death in the onset of enteric fever, point to nerve implication, and sustain Murchison. Moreover, in his opinion, cerebral symptoms are generally due to retention of products of tissue change. These products also are supposed to render the blood super-alkaline.

The paralysis of the sympathetic, by causing congestion of organs, also explains the tendency to inflammatory complications.

Inferences as to Treatment.

Can we treat the cause of typhoid fever? The attempt would be irrational. We know nothing of the nature of the so-called poison; whether its action is that of a ferment, or catalytic. We are indeed ignorant of what essentially produces disease, but we do know something of what is produced. This production moreover, will in turn be a secondary cause to other phenomena. Thus the first cause which is intangible, and beyond medicine, produces as effects other causes, whose results can be appreciated, and modified by medicines. The sooner we can recognize and treat the symptoms of fever, the better our chance of breaking the chain of cause and effect and so helping our patient.

Harley almost persuades us, that congestion of the liver, is the first effect of the typhoid poison, and that, consequently, a few doses of mercury will stay the disease. Niemeyer believes in the good results of mercury in a few cases. We know, however, that typhoid fever has bounds, which have never been displaced by mercury. We also know the effects of the drug upon the blood. Yet the "bilious" symptoms of the prodromic stage, seem to call for one or two doses of mercury.

Quinine has been tried as an abortive agent, and has been found wanting.

Remarkable results have followed the cold affusion. It will engage us hereafter.

As has been stated, in typhoid fever we can only treat effects. If we hold a slide wetted with hydrochloric acid in the breath of a fever patient, crystals of chloride of ammonium will be deposited upon the glass.

Silurus will reveal the character of the stools. The exhalations from the body are also ammoniacal. The blood is super-alkaline. This morbid fluid will cripple all the functions of the body. Upon the nerve centers especially will its influence be manifest. To correct the condition of the blood by acids.

That there is exaggerated waste of tissue in enteric fever is indisputable. If eliminated, the product is inert: if not eliminated, it gives rise to cerebral symptoms which cannot be distinguished from the cerebral symptoms of uraemia. The retention of urea, moreover, involves a tendency to local inflammations. Nothing can be more natural than to unload the blood. Spirit of nitrous ether is the most available diuretic

Tea, coffee, and common salt have also diuretic properties in fever. Diaphoresis may be obtained by sponging. We cannot eliminate by the bowels for reasons to be hereafter given.

Another effect of the diseased mode of motion in typhoid fever, is abnormal temperature. The effect of heated blood upon the functions of the body are familiar. A certain heat, moreover, has been found incompatible with life. The cerebral centers, of course, most readily respond to the influence of high temperature. Obviously, the cooling of this super-heated blood is as important, as the correction of its super-alkalinity. We cannot stop the abnormal production of heat, but we can abstract it from the body. Cold water will lower the temperature fatal to life. Amelioration of all symptoms, cerebral especially, follows the use of this simple means.

In typhoid fever there is increased change of particles; as, witness the high temperature. That this change is destructive of the tissues, is demonstrated by the loaded urine, and by the emaciation. The process of destruction is exaggerated. The process of building up is at its minimum. The fever consumes what it will not restore. In health we measure supply by waste. In fever, with excessive waste, what else can we do than supply those materials which in health neutralize the body's waste? The heat of a typhoid patient measures a force which would carry him many miles. Could a healthy man walk day after day without food? A sick man's sensations are poor guides as to whether he shall have food. Disease blunts his perceptions. Starvation makes men indifferent to food.

In the early stages of fever, there is always a craving for water, and at all periods, it is eagerly drunk. This element makes up the greater part of the body, and its want is most ~~spontaneously~~ felt. What is true of water, must be true of all other elements, and all should be supplied. Moreover, typhoid fever is a self-limited disease. If we can sustain a patient three weeks, he will probably get well. We are induced, therefore, to give as much food as can be assimilated in enteric fever. Overloading the stomach will be attended with vomiting, flatulence, or diarrhoea. Later, however, the action of impoverished blood upon nervous centers seems to paralyze them, preventing them from feeding on the blood, poor though it be. Stimulus and food are demanded and found ~~in~~ alcohol. That alcohol has a special affinity for nerve tissue, is known

Whether it be a food is disputed.
Some believe alcohol prevents waste, by substituting its carbon and hydrogen for that of the tissues. It is certain that a portion of alcohol taken, is retained in the tissues, that, alone, it will sustain the body for many days, and that it prevents emaciation.
As regards its stimulant property, we must remember that the exaltation of a part to its normal condition does not exhaust it. Alcohol merely raises a perverted action to one nearly healthy. Both extremes of debility as denoted by high temperature, or coolness, small quick pulse, or one slow and feeble, coma and delirium, restlessness & wakefulness, have been time and again relieved by spirit. Small, and frequently repeated doses, should be the rule for its administration

Statistics show that many a fever patient has recovered under the benign influence of food and pure air. If our patient breathe only his exhalations, he will surely pass away. Recovery depends as much upon a supply of oxygen, as upon food of other nature. The body should be cleansed from acrid discharges to avoid erythema, & subsequent bed-sores.

The symptoms demanding special treatment will engage us a short time. Danger may always be apprehended from diarrhoea. The disease is most severe where there is greatest purging. Mild cases sometimes occur with constipation; the intestine at the same time ulcerated. "It is very doubtful if the cerebral symptoms of enteric fever are due to absorption of putrid substances from the intestines; and if they were, no amount of purging would prevent absorption" There is no relation between the severity of cerebral symptoms, and the extent of intestinal lesions lesions

We must quiet the peristaltic movement of the intestines, and restrain the diarrhoea. Hemorrhages may be fatal, and demand instant treatment. Acids must be suspended if they produce vomiting. A tube in the rectum will relieve flatulence. Sleeplessness demands an opiate. (Chloral.) Peritonitis is the only complication we can consider. Should such event happen, opium and perfect quiet constitute our forlorn hope.

Throughout the fever, we will allow nothing to excite the lower part of the small intestine. We will also restrain the bodily motions of our patient. Any irritant, whether food or medicine, any exertion, may induce fatal hemorrhage, or perforation with peritonitis. Cicatrization, only, will relax our vigilance.

Summary.

We deal with the results of an increased change of tissue, in typhoid fever. It is a diseased mode of motion, with all its consequent effects, which engages us. It is this movement which causes high temperature, which loads the blood with effete matters, and which wastes the body. These general effects, in turn, will develop the special symptoms of typhoid fever. In the preceding pages our objects in treatment have been the correction, depuration, and cooling of the blood, and the supply of wanting materials.

Thesis.

Chas. E. Scholl,

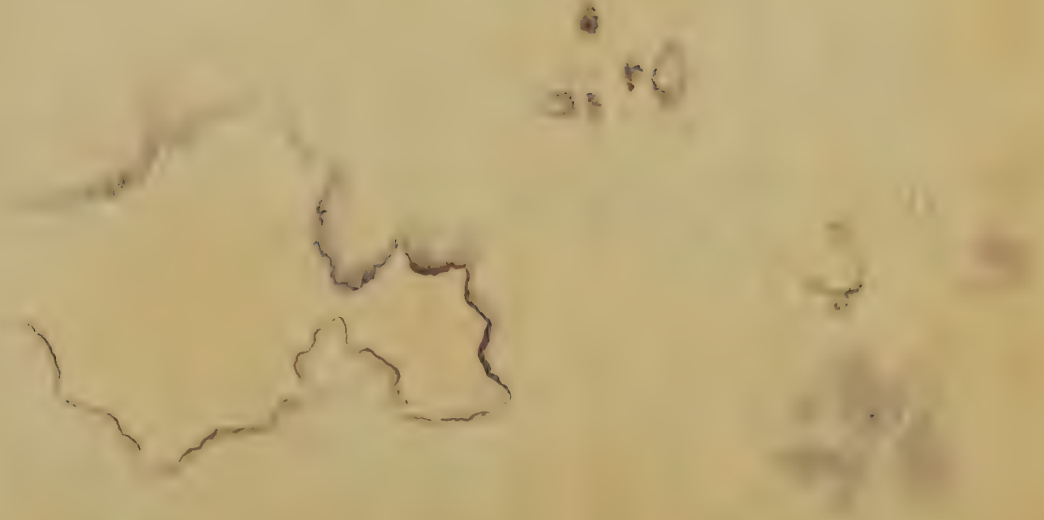
Feb. 1873.

Thesis. 1

Tubercular Meningitis.

There is no disease of the cerebro-spinal system in early life more interesting to the modern practitioner than inflammation of the meninges. So long ago as seventeen hundred and sixty eight Dr. Whytt, of Edinburg called the attention of the profession to this diseased condition, and from its most prominent anatomical character, he and his followers, regarded it as a dropsy.

Within the last thirty five years, the profession have come to regard the disease as inflammatory in character, giving it the name it now bears, which they believe expresses its true pathological nature. The term meningitis was, for a long time, made to include all inflammations of the meninges.



but the researches of Gerhard and others led to the recognition of a peculiar form of meningitis in which the inflammation was due to tubercular deposits in or under the meninges, in the same manner as in the lungs it causes inflammatory diseases of lung tissue or the pleura. The frequency of its connection with tubercular deposits in other organs, as revealed by many autopsies and the better acquaintance of pathologists with the microscopic elements of tubercle have sufficiently proven its true character. Recent observers have, from laborious examinations come to the conclusion that this disease, though most frequent after the child has reached its first year, is sometimes met with in infants not older than four months. According to the statistics of our

most distinguished) observers the disease is most common between the ages of three and seven years.

Anatomical Characters.

A distinctive feature of tubercular meningitis is the situation of the inflammation at or near the base of the brain. That in simple meningitis the meninges at the superior and lateral portions of the cerebral hemispheres are chiefly affected. The dura mater commonly escapes or is affected secondarily. In some cases it retains its normal appearances, in others its arachnoidal surface is dim and lustreless. In some cases where the inflammation has been severe there has been found upon the surface of the arachnoid either pus or serous effusion

Although the above mentioned changes may sometimes be noticed in the dura mater and arachnoid yet the inflammatory action generally commences and is confined to the pia mater. The latter membrane is commonly injected over a greater or less extent most apparent, as a rule, at or near the base of the brain the inflammation being confined or most intense near the pons Varolii in the subarachnoid space and along the fissure of Sylvius. Pus when present is in nearly a semi-solid condition from the small quantity of liquor puris which it contains. This element of pus having undergone absorption. After the absorption of the liquor puris the pus cells become shrivelled and irregular presenting the appearance of cheesy transformation of

tubercle cells. The fibrinous exudation may, by its opacity, conceal from view the brain underneath. It may be infiltrated into the substance of the pia mater, or it may be collected into small firm masses of a whitish or light-yellow color resembling closely tubercle corpuscles. We may have then pus cells, masses of fibrinous exudation, and tubercle corpuscles resembling each other so much that the pathologist may have great difficulty in distinguishing the true nature of the disease. Indeed, when we consider that tubercle cells are round, pale and slightly granular, each having from one to two nuclei, that they are somewhat smaller than the white corpuscle of the blood, resembling the normal cell of the lymphatic glands, we

must conclude that we can not with the microscope examine the results as found in the brain and determine whether the disease be simple or tubercular meningitis. If upon close inspection we find the true tubercle cell in other organs as the lungs or liver or if the concomitant circumstances justify the conclusion we can only then safely declare the superficial lesions to be of tubercular origin. We may have, says Dr. J. Lewis Smith, tubercular meningitis without a deposit of tubercle upon the meninges in the same manner as we have inflammation and ulceration of larynx with the deposit in the lung tissue.

The very common result of the inflammatory process is an effusion into the ventricles

of a clear, straw colored or turbid fluid which from 1 to 2 ounces may distend the fontanelle.

Causes. I need say but little of the causes. The presence of the tubercular diathesis, and the evidences so often afforded by family history point to hereditary transmission as the most fruitful cause.

Symptoms. The premonitory symptoms of tubercular meningitis may vary very much. Cases have from time to time been reported presenting nearly opposite symptoms, and quick cases are well calculated to lead the young or hasty physician into making an incorrect diagnosis. In the first stage of the disease there is during certain hours, marked acceleration of the pulse, which may con-

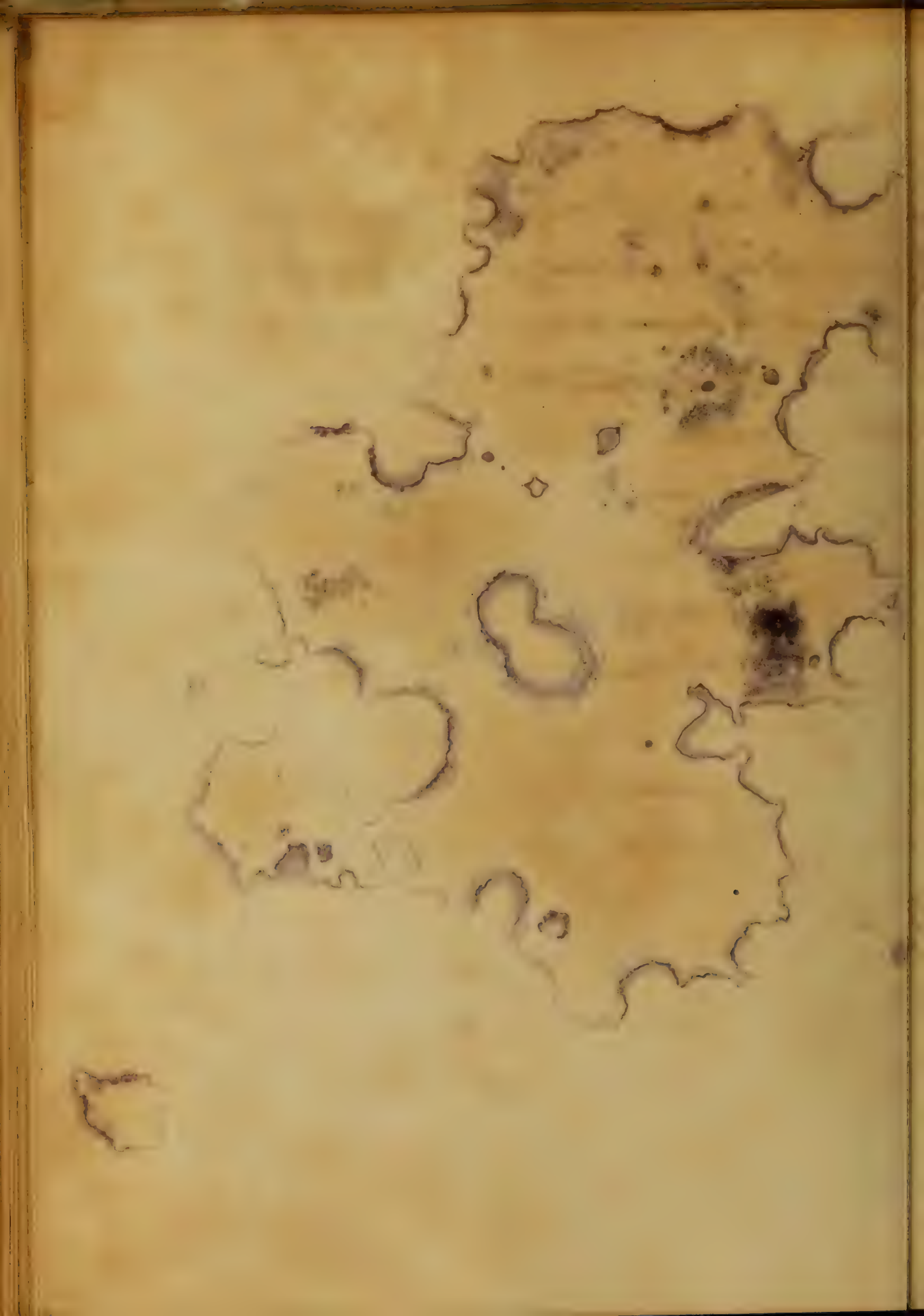
time for several hours. Then the heart will resume its normal frequency. For a time the fever may be considerable and after continuing for an indefinite period may suddenly cease to be followed by return of fever and again by convulsions. Vomiting is a usual symptom and is doubtless due to the intimate relation existing between the stomach and brain by means of the nervous system. It is not like the vomiting from an emetic but the contents of the stomach seem to be ejected without being preceded by nausea or followed by the usual distressing symptoms. At the first there may be a slight diarrhoea but when the inflammation in the meninges is fully established the opposite condition (constipation) will be present.

Head-ache is a very prominent symptom and if the patient be old enough to express his sensations will often exclaim suddenly "oh my head." The eye being accompanied by an expression of countenance denoting extreme pain, The tongue moist with tip and edges relieved.

Second stage. The patient will now be sensible to everything going on around him, lying most of the time as if half asleep, and when aroused will become very fretful and peevish. Flashes of redness will now and then pass across the face contrasting very singularly with the characteristic pallor of the surface, The abdomen becomes retracted or boat-shaped to such a degree that the pulsations of the aorta may be felt without giving pain, Cephalalgia is still complained of if the patient can be persuaded to answer a question or

be able to utter it sharply. Respiration becomes very irregular and pulse slow, if the finger nail be drawn across the abdomen or cheek the cachectic meningitique will be apparent. Some writers consider this symptom pathognomonic whilst others recognizing its importance do not attach to it so much value. At times, the patient will surprise his friends, and physician also if the doctor be not experienced by transient symptoms of improvement but let the physician be careful not to proclaim a favorable prognosis or flatter himself with hopes of ultimate recovery.

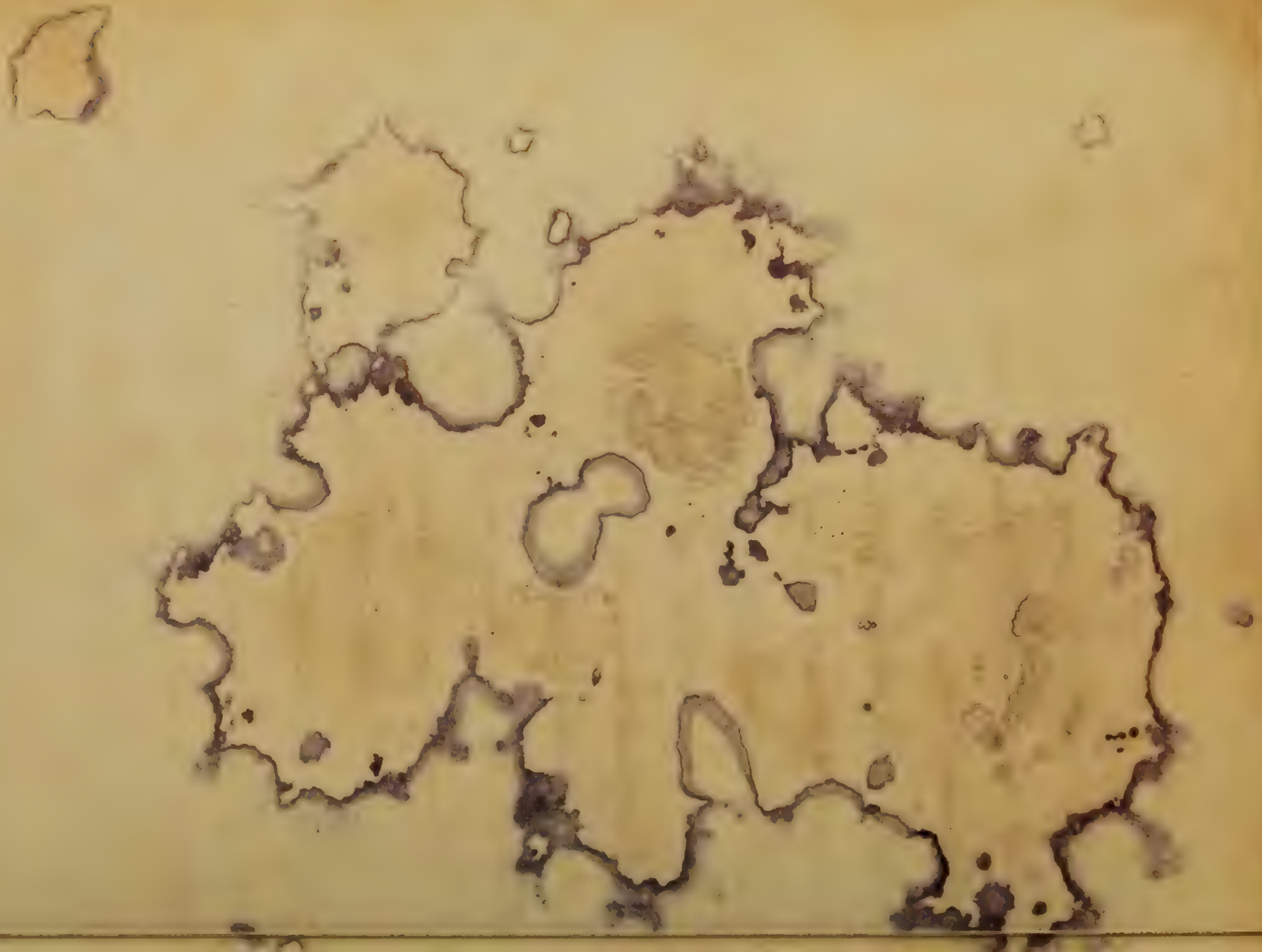
Third Stage. In this stage is restored (as the pupil becomes more profound) - no token, unless very transient, of intelligence gladdens the hearts of the watchers; the eye assumes a fixed stare or it may be one eye



[illegible] [illegible] [illegible] [

[illegible] in typhoid fever and [illegible] not [illegible]
[illegible] with [illegible] average duration is
about twenty days

Diagnosis, The diseases from which we will
have most difficulty in diagnosing between are
miliary tuberculosis, typhoid fever
and pneumonia with cerebral complications,
The differential diagnosis between tubercular
and typhoid miliary is very difficult - the
constitutional cachexia and family history
alone assisting us in arriving at a correct
conclusion. If typhoid fever be suspected
absence of ileac tenderness combined with
irregularity of respiration will in most cases
be sufficient evidence to exclude this latter
disease, The ratio between the respirations and
pulsations will assist us materially in deter-
mining whether pneumonia be present or not



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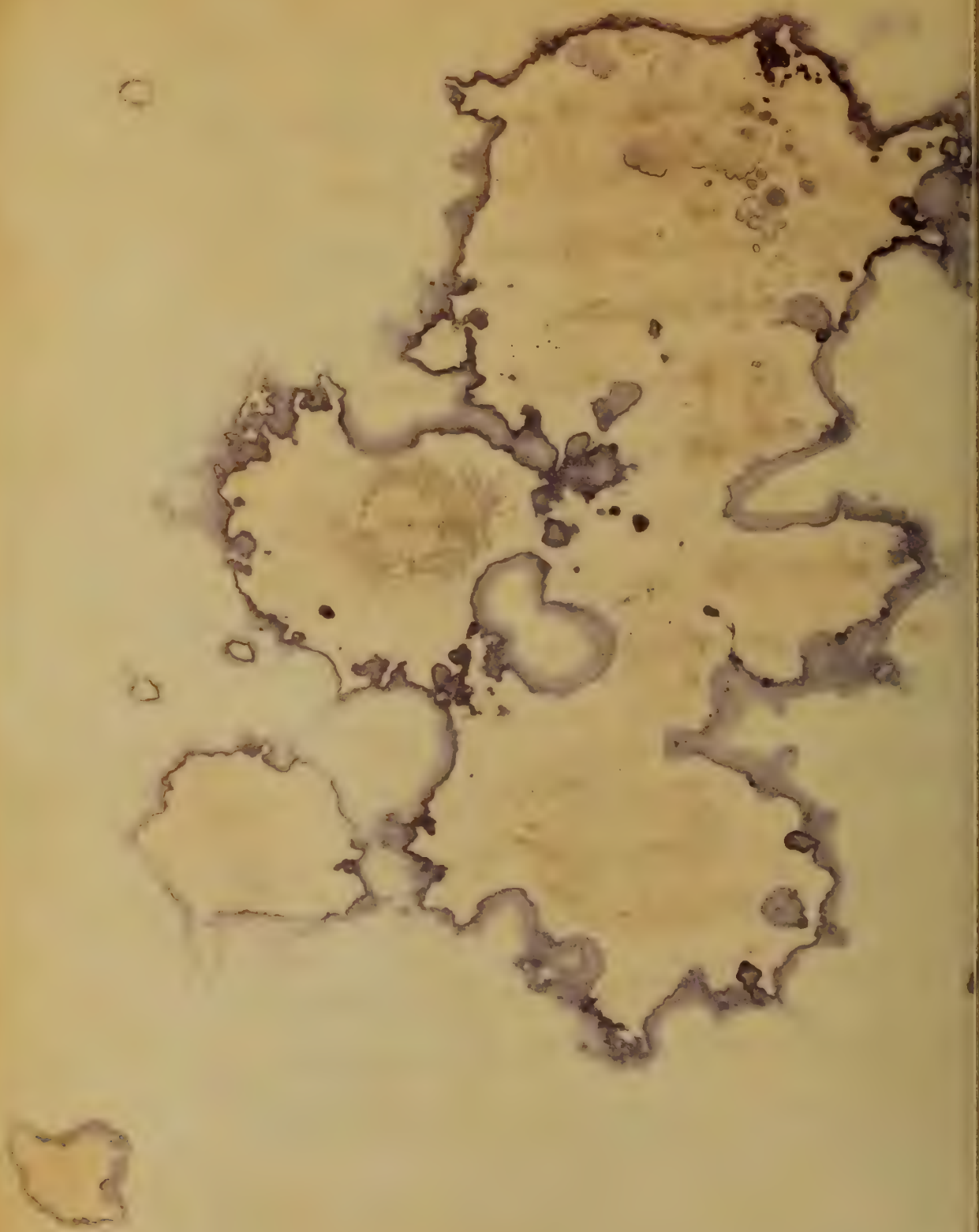
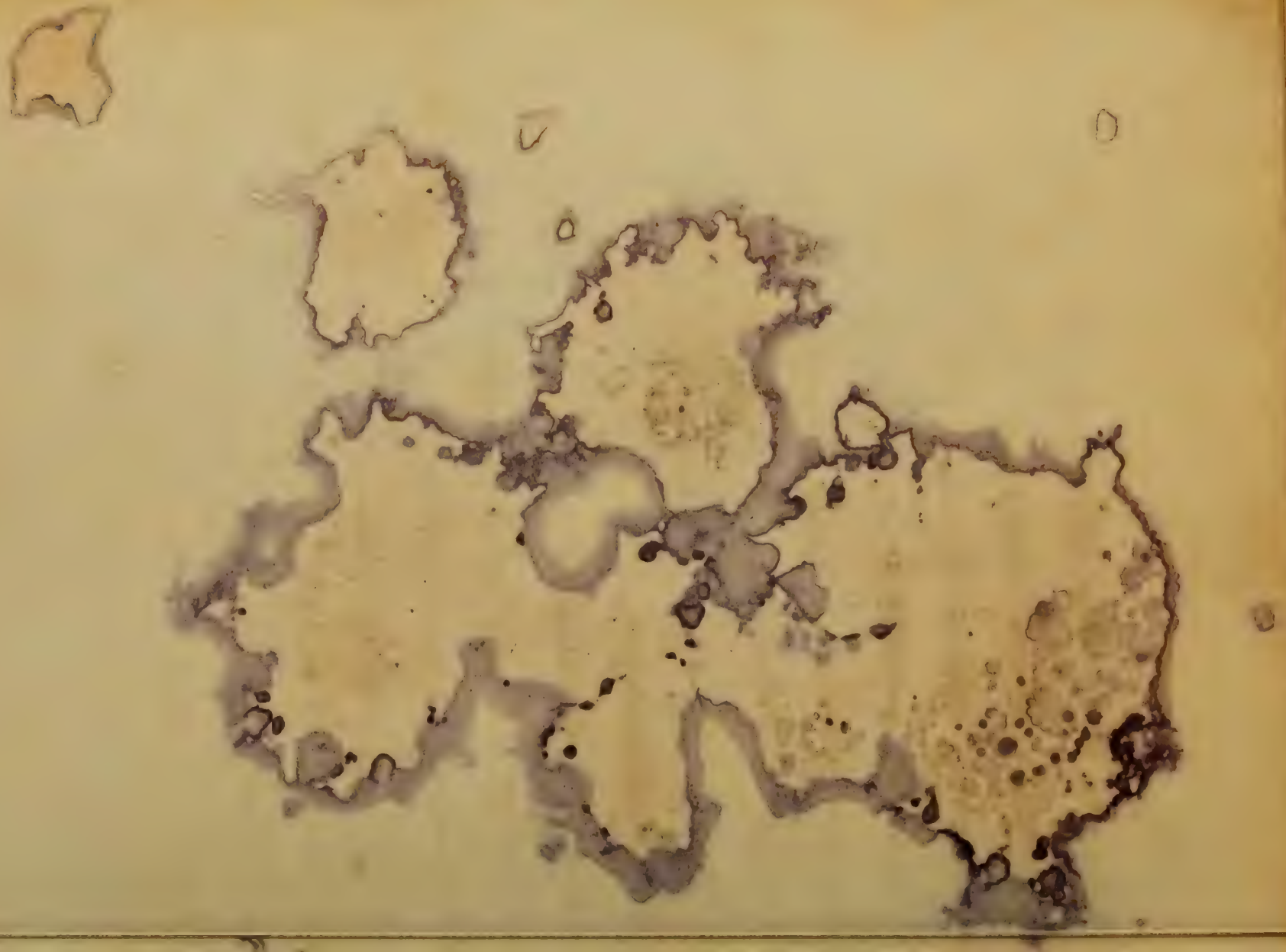
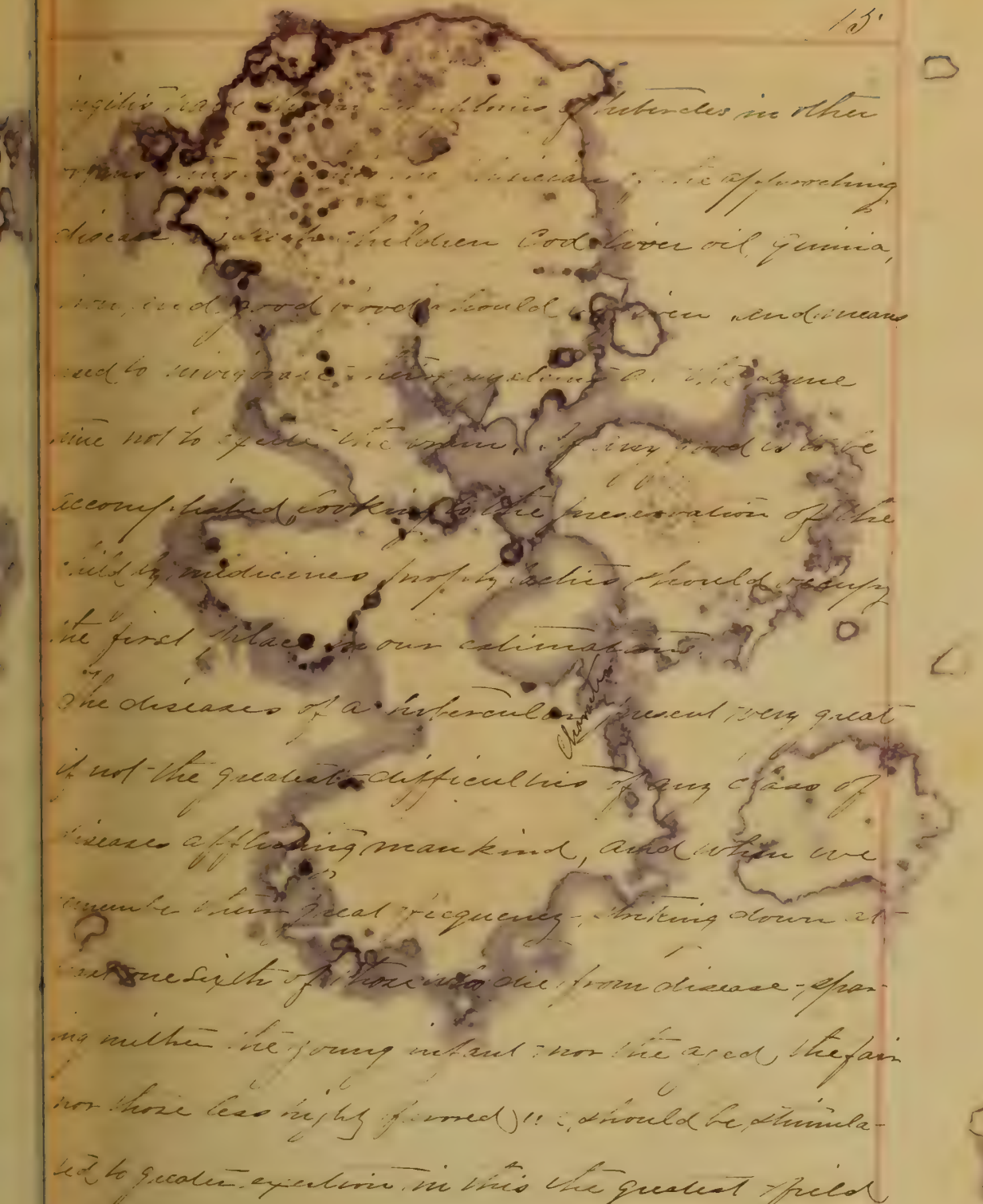


recorded so; great care should be observed in
administering them: it we must remember
not only their effect in curing a fever but
their produce by extirpation of anything of the
suppressed contra-indications in an inflammatory
diseases of the brain & its meninges. They are
given here for the purpose of ordering Mercurie
Chloride, should be given in small doses
frequently repeated) in the mean time watch-
ing carefully their effects, the Iodide potass
either alone or in combination with Bromide
potass has been highly recommended and if
there are no contra-indications it should be used
early in the disease and long continued, Calo-
mel may be used as a cathartic and will of-
ten do good. Antiemetics and antispasmodics
have no place in the treatment of this affection,
Many children who are tormented with worm-





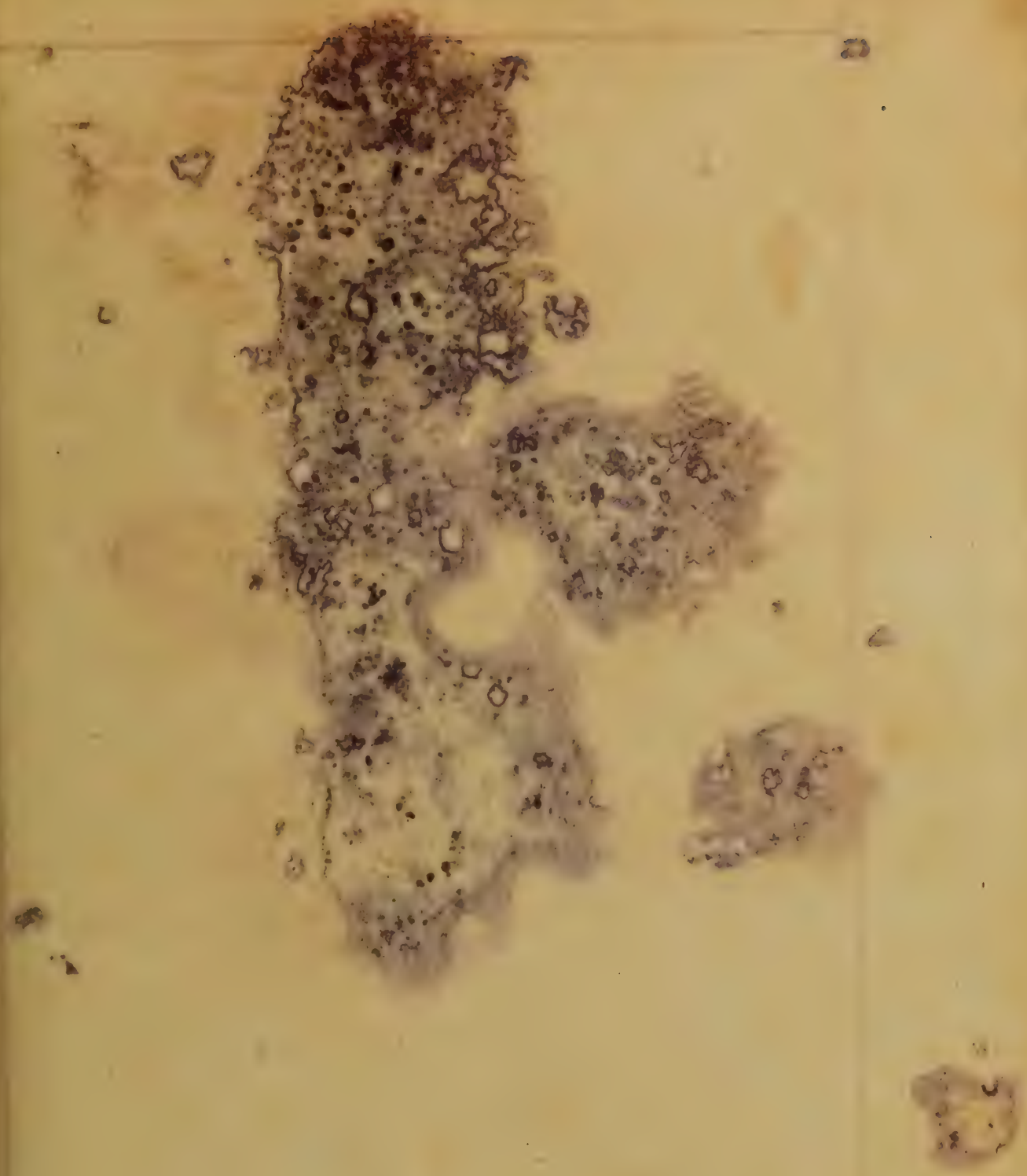
ingibis [illegible] tubercles in their
[illegible] disease; the spurious
disease yields to the cod liver oil, quinia,
iron, and good [illegible] food, when endeavours
used to invigorate the system. It became
mine not to [illegible] the whole, if any food is to be
accomplished [illegible] to the prevention of the
child by medicines, most [illegible] should occupy
the first place in our estimation.
The diseases of a [illegible] present very great
if not the greatest difficulties [illegible] any class of
diseases afflicting mankind, and when we
consider their great frequency, striking down at
[illegible] one eighth of [illegible] die from disease, sparing
neither the young infant nor the aged, the fair
nor those less highly favored [illegible], should be stimula-
ted to greater exertion in this the greatest field
for the true philanthropist — in staying the

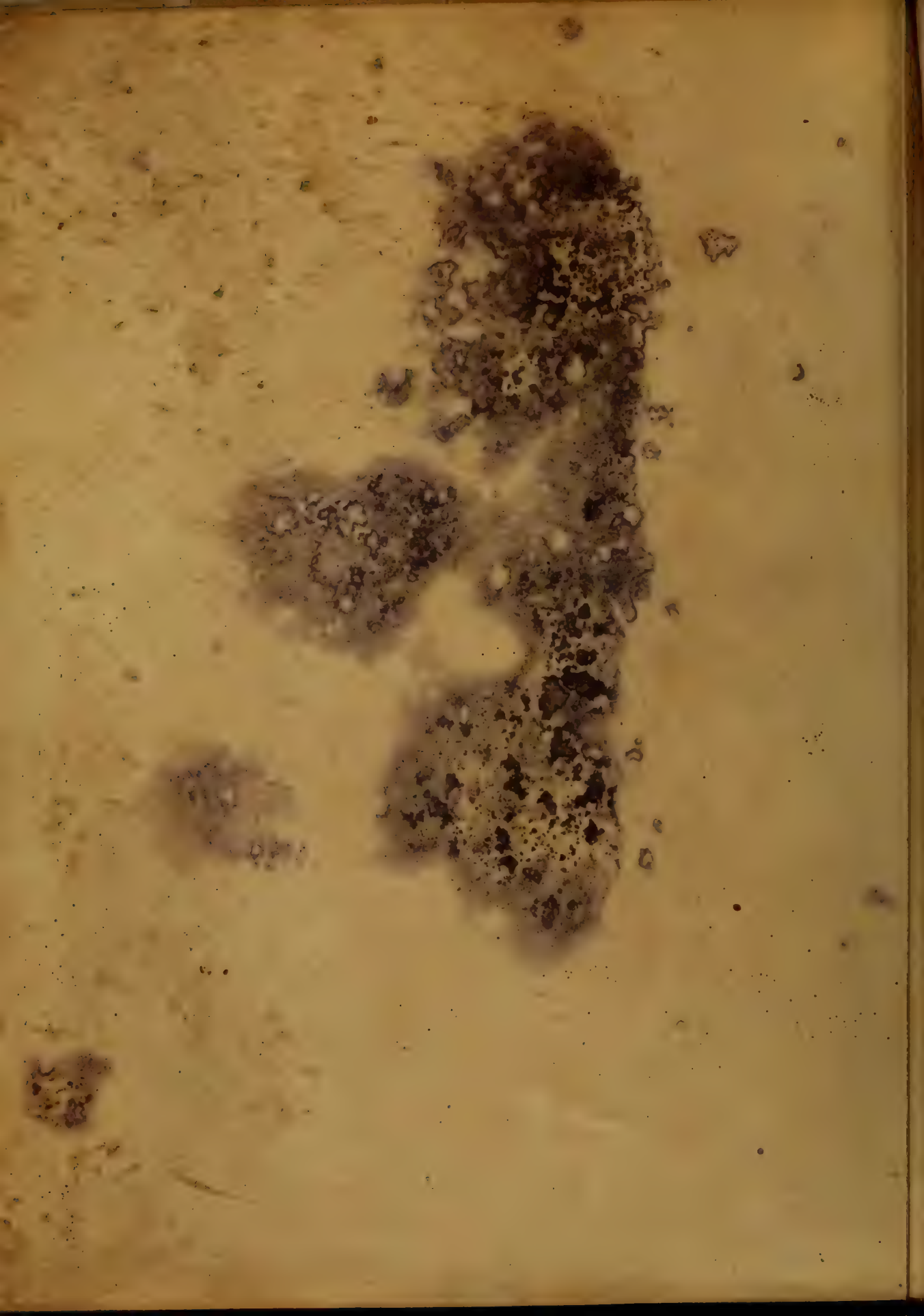
hacked of the [illegible] that the man of medicine can [illegible] hand helplessly by the side of the [illegible] watched by attending relatives of the deceased, his to sound the knell of their hopes - if [illegible] but to smooth the pillow of dying. But as I believe the time is not far distant, and as I hope, near at hand, when this fell destroyer and pestilence of our race will yield to the enquiring hand and the onward march of science. Although there is so much of it to be accomplished, yet what has been done in the last half century encourages us to believe that this consummation so devoutly to be wished is only a question of time.

Respectfully submitted to the Faculty.

Chas. E. Scholl,

"Infirmary" Feb 1st 73





I shall mention also the causes of Rheumatic abortion, and the [illegible] accidents [illegible]

In first I shall consider are [illegible] in the womb, [illegible] malelions, and these are very [illegible] [illegible] [illegible]

[illegible] that in heathen countries the [illegible] the [illegible] [illegible] [illegible]

[illegible] [illegible] [illegible]
[illegible]
[illegible] [illegible] [illegible]
[illegible] [illegible] [illegible]
[illegible] [illegible] [

[illegible] of the arteries, [illegible]
[illegible], and [illegible]-fatty degeneration of the placenta.

[illegible] separation of the placenta from the uterus is often a cause of abortion, but a placenta which has been [illegible] and [illegible] should not be called that because of a [illegible].

The [illegible] of the [illegible] of the umbilical cord, thereby cutting off the circulation of the child is considered as a cause, if [illegible] be an abortion, if the [illegible] should [illegible] the placental [illegible] and not all other foreign bodies,

[illegible] is expelled.
[illegible]
[illegible]
[illegible]

weakened from debility, and
all who, except it be desirable
during a middle age.
This is true of a case recorded
in Cases of a young woman
who started three times during
her first month, her husband
being a delicate man, she be-
came a widow, and married
a second time, and ever after-
wards her health was
bad term, & she was delivered
healthy.
That excessive and governing
desire due to the father's con-
stitution, & that and the
most delicate to the female

proceed to show, that it is
actions virtuous, and such
as tend to this end, they are
more rare generally than we
think.

We have now considered the pre-
dispositions, or those rules which
the second step of that process
is, or causes which make them-
selves such as are subject and
come from without.

It is thought by some writers
that too great moral, and
personal excellement may cause
inertia, but those writers are
confuted by some very great
authorities, however there are

On

Inaugural Dissertation

On

Bronchitis

Submitted to the examination

of the

Board of Regents and Faculty of Physic

of the

University of Maryland

for the

Degree of Doctor of Medicine

by

Benjamin R. Benson.

Session 1872 & 73.

Springfield Md.

Bronchitis

The term bronchitis is applicable to any case of inflammation of bronchial tubes, whatever may be its grade, character, or precise locality. It is probably the most the most frequent disease of early life. It is usually associated with or preceded by more or less inflammation of the mucous membrane of nostrils, larynx, or trachea. We designate the disease coryza, laryngitis, or bronchitis according as the one or the other inflammation predominate, though sometimes bronchitis with slight inflammation elsewhere, and often when attended with severe inflammation it abates, while the bronchitis is still active. Bronchitis occurs both as a primary and secondary disease. The secondary form occurs in connection with measles,

scarlet fever, pneumonia, hooping cough and pulmonary phthisis; and it is not uncommon in variola, remittent, and continued fever. Bronchitis is mild or severe, and acute subacute or chronic. Bronchitis is a bilateral disease, affecting the tubes on, the two sides with equal intensity. As a primary disease essentially so, and in the secondary form also with a few exceptions, namely pneumonia and pulmonary phthisis. In such cases it is circumscribed, or confined to those tubes or nearly to those which are surrounded by the tubercular or inflammatory product

Etiology. The causes of primary bronchitis are, sudden changes of temperature exposure to currents of air, going from-

heated rooms into open air, without sufficient clothing, the throwing off of bed-clothes at night. Debilities is also an occasional cause, It is sometimes the result of the inhalation of acrid and irritating vapors such as the fumes of nitric acid ammonia. Anatomical Characters. In the most common form of the disease, the larger tubes alone are affected, and such a condition would by families be designated "cold on the breast", and is generally treated without the aid of a physician. The membrane lining the bronchial tubes, present the usual anatomical characters of inflamed mucous membrane elsewhere. It is reddened in patches, or uniformly according to the severity of

the inflammation. The secretion of the mucous membrane are first arrested and the surface becomes dry. In the course of a day or two the secretion is reestablished, and the surface is covered with thin transparent mucus, and in from 36 to 48 hours is succeeded by a thicker secretion, consisting of pus, & exfoliated epithelial cells in abundance. The mucous membrane is thickened, and softened with injection of the vessels of submucous and cellular tissue. The duration of bronchitis is from four to eight days, though it may last several weeks. The inflamed membrane returns to its normal consistence, vascularity, and thickness, and with this return to health, the muco purulent secretion abates

If this which is the bronchitis limited to the larger bronchial tubes, was the extent of the disease it would be a comparatively trivial affection; but while the majority of the cases stop here there are in many exhibited a tendency to extend downwards The gravity of the disease is in proportion to the intensity of the inflammation; but more particularly to the size of the tube inflamed. Commencing in the larger tubes it gradually invades the smaller ones. It may stop at any point; but if it reaches the bronchules, it becomes one of the most serious of early life, namely capillary bronchitis The mucous membrane of the bronchules is delicate, with but little submucous cellular tissue, and it frequently at first evolves

examinations, does not present to the eye those distinct inflammatory changes which are observed in tubes of larger diameter. It is sometimes not notably thickened, nor its vascularity much increased, even when there is reason to believe from the symptoms that it was the seat of active phlegmasia. The larger tubes present distinct lesions of inflammation, it is marked with abundant points of redness, and thickening, and is sometimes rough and granular. The minute bronchial tubes are very small especially under three years of age, and in this disease so many of them being inflamed, the source of danger is apparent. The small tubes usually in the

posterior portion of lungs, become more loaded with mucous, and pus, obstructing the ingress of air; but allowing of its escape by forcing the plug into the larger channels of the tube till, finally one after another of the tubules are emptied and pulmonary collapse is induced. The color is from a lightish gray to black, and it has a smooth incised surface, and can be inflated to its normal capacity: thus differing from hepatized lung which bears a granular appearance, with exudation of inflammatory products and can not be inflated. When the inflammation extends farther implicating the air cells, it is known as lobular pneumonia, which is characterized by depression of lobules

below - the common term, of attack and color from passive congestion. Pain to the touch and consolidation are very feebly exhibited. This condition of lung has also been designated "tubular pneumonia". The substance which exudes or collects in the bronchial tubes is usually mucopurulent, but in exceptional cases, in addition to mucus and pus, there is more or less fibrin. This ordinarily exists to a small extent, but in rare instances it occurs as a firm continuous membrane forming a perfect mould; which increases the severity of symptoms, and constitutes a true bronchial croup. If the patient survive the immediate effects of capillary bronchitis, the inflammation soon ceases. The epithelial cells become enlarged

-granular, and opaque, and mixed with large cells filled with oil globules.

These are the compound granular cells of pathologists, and are produced by complete fatty degeneration of epithelial cells. This stage immediately precedes liquefaction. If the lobules remain collapsed for any considerable period, either from the feeble expiratory efforts of the child, or from pus which obstructs the tubes, they may undergo such change as moved to be inflated even when the obstruction is removed. If the lung be examined at this time, it will be found difficult, if not impossible to expand them, even by strong inflation, the lobules that have been collapsed for a considerable period. These lobules

have a greater specific gravity than water
Formerly it was supposed that capillary
bronchitis by the extension of inflammation
very often did eventuate in pneumonia;
but many such cases on examination
were found to be pulmonary collapse. But
it is still held by some authorities that
inflammation does extend from the
minute bronchial tubes into the pneu-
chyma of the lungs in infants, and
therefore result in pneumonia. Minute
abscesses have occasionally been found at
the autopsies of those who recently have
had capillary bronchitis, usually found
directly under the pleura, and pathologists
do not agree as to the mode of their
production. The view held by some

authorities is, that they are produced in the terminal tubes where the mucous is not free collect. They acting as irritants cause inflammation, and the inflammation increasing the quantity of pus.

This abscess forms membrane for itself similar in character to that of a larger abscess, though less thick and firm and this constitutes the wall of the cavity.

The abscess is generally found in the middle of a collapsed lobule; sometimes approaching so near the surface of the lung as to produce circumscribed pleurisy. Pneumo-thorax is an occasional result, from opening of these abscesses into the pleural cavity. Dilitation of bronchial tubes is an accident incident

to bronchitis. Emphysema is a common result observed in infancy, and childhood especially. It is observed in upper lobe, and more frequently in the anterior than posterior part. Symptoms. They vary with the size of the affected, those incident to large lobes being less severe. It usually commences with more or less coryza, slight cough, languid loss of appetite, and very often will pass off without any other unpleasant symptoms; but other times the cough is light, and attended with pain, anorexia, and symptoms of inflammatory fever; worse at evening and night, with thirst. The respiration and pulse are somewhat accelerated. There may be partial

Auscultation in these cases reveals coarse mucous rales in the large tubes, while the smaller tubes are free from mucous. Sibilant and sonorous rales are also heard especially in the commencement of bronchitis at which time the secretion is scanty The cough for the some reason is dry. It becomes loose in two or three days: the sputa consisting of frothy mucus mixed with pus and epithelial cells, subsequently the pus becomes more abundant. Expectoration seldom occurs in children, till after the age of four or five years. The form of bronchitis described above, is common at all periods of life; but a severer grade of the disease is also of common occurence, exclusive of those cases in which the minute branches of the bronchi

Tree are affected. There is a tendency in bronchitis to extend downwards, and the gravity of the disease is in proportion to the degree of extension. In severe bronchitis the pulse rises to 120 or 130 per minute, and the respiration is in a corresponding degree accelerated. The cough is frequent, and painful, the pain being referred to the sternum. It is described as a dull constant, heavy pain. The temperature is greatly elevated. (Appetite impaired, or lost. The face is flushed and indicative of suffering. There is commonly exacerbation of symptoms in the latter part of the day. (Auscultation in severe bronchitis reveals the presence of rales in all parts of the chest, coarse mucous, and subcrepitant in abundance, sibilant and sonorous

sparingly. The percussion resonance is not interfered with. The worst form of this inflammation is less frequent than bronchitis which is limited to larger tubes, or the larger tubes and those of medium size. In capillary bronchitis, or suffocative catarrh. It may commence abruptly, but commonly results from the milder form, by the extension of the inflammation. The symptoms at first are, those as described above, they gradually increase in severity till, suddenly marked dyspnoea supervene. The inflammation has now reached the minute bronchial tubes, and what promised to be an ordinary attack of bronchitis becomes one of great severity and danger. The respiration in capillary bronchitis is hurried and short, averaging from sixty to one

hundred per minute. The pulse is also accelerated in frequency, volume, and tonicity, numbering 140 to 180. Cough frequent paroxysmal, and dry at first. If the patient survive a day or two the sputa is changed from transparent mucus to a thick purulent, yellow secretion sometimes stained with blood, Temperature high. The face bears an anxious expression, flushed and indicative of suffering. The patient tosses about going from one side to the other, losing its head Digestion impaired, tongue covered with a light fur. The appetite nearly or entirely lost. The patient refuses to take solid food, and liquid food is taken hurriedly and gulped down as rapidly as possible. The nursing infant nurses with difficulty, frequently relinquishing the breast on account of the dyspnoea. On ausc-

culation, at first we have, sibilant, and after thirty-six to forty eight hours, subcrepitant rales are heard all over the chest. Percussion resonance normal, except when the substance of lung become involved. As the disease approaches the fatal terminations, the pulse becomes greatly accelerated and the respiration also, but in greater proportion than in any other disease, panting. The face becomes pallid, and probably livid, and convulsions close the scene, vomiting not infrequent in both stages. The nursing infant survives some several hours before death, it becomes stupid, followed by the fatal event. in consequence of accumulation of carbonic acid in the blood. Toward the close of life the respiration may be seen to intermit, after every six or eight inspirations, will cease for a time equal perhaps to

that occupied in half dozen or twenty secs.
2. This is an unfavorable prognostic sign. The duration of bronchitis varies, in the mildest form the patient is usually convalescent after three or four days, in the severest form it begins to decline by the close of the first or beginning of the second week though continues after convalescence is fully established, though gradually declining. It is not attended with any pain. Death may occur in capillary bronchitis, in 24 hr. The average duration of fatal bronchitis is from six to eight days. If the patient pass beyond the tenth day without any complications, decline of the inflammation, and recovery may be confidently expected. The acute occasional results in the chronic, and often form mild as the severe. In this form all the acute symptoms are absent, and

The health is nearly or quite restored: but the cough persists, with mucous rales. There is a liability in the chronic form to exacerbations. The disease often seems to be abating, and there is a prospect of recovery; when all the symptoms are suddenly intensified. After an attack of bronchitis, of whatever form the mucous membrane is very sensitive to the impression of cold. Chronic bronchitis occurs most frequently in the winter, and fall; when the weather is changeable. The general health in chronic bronchitis when not dependent on tubercular deposit is ordinarily good. Tubercular bronchitis which is the result of a grave disorder, and is attended with emaciation. In these cases the bronchitis is obstinate, and will not yield to treatment. It is due to the irritating

effect of the tubercular matter lying in contact with the bronchial tubes.

Diagnosis. Bronchitis can ordinarily be distinguished by the character of the respiration and cough. The absence of hoarseness, stridulous respiration, and croupy cough excludes laryngitis, and the absence of the expiratory moan and stitch like pain on coughing, which characterizes pneumonia and pleurisy equally exclude these diseases. Examination of chest enables us to determine with positiveness the nature and and extent of the disease. If the inflammation be confined to the larger bronchial tubes, coarse mucous rales are discovered in them, while the fine mucous rales are absent. If the bronchitis is capillary subcrepitant rales are discovered in the smaller tubes. There is the normal resonance.

on both sides of the chest.

Prognosis. The prognosis is not exactly favorable should be guarded, because the disease is liable to extend, and may carry off the patient in a few hours; but if the disease pass beyond, four or five days, without any complication or inconvenience the prognosis is considered fast.

Treatment. The treatment of a mild case is very simple. It is very seldom necessary in the milder form to confine the patient to the room, but should be kept within doors. Avoid drafts, and change of temperature. which should be about 70°. Good diet such as boiled Of an infant, of feeble debilitated constitution rice whey is good, An emetic in the first stage for which disease will be required to be used. If skin is hot and dry, with frequent paroxy-

ysm of coughing, in a child over two years of age, ipecac is not so well adapted as tatar emetic in doses of 1/20 to 1/5 of a grain in syrup of gum acacia, and water, with a little citrate of potash. this will have a remarkable effect in allaying restlessness, and relaxing the skin. Bloodletting is seldom called for in this disease especially in children. If called to see a child of robust constitution in the country, with a full hard pulse, and moderately high fever, the local abstraction of blood or, even general blood letting would be admissable it will cause relaxation of skin, abate fever, after which the cough becomes loose, then an expectorant is called for such as syrup of senega, scillae, and ipecac each ℥ij ℥ss ℥x every 3 hours. Children under five years,

of age do not expectorate, hence an accumulation of mucus takes place, which calls for an emetic of a more decided character of which ulum is the best representative.

The local treatment of bronchitis is very important. Mild counter irritation with mustard or turpentine. The chest should be covered with oil silk. Blisters as a general rule should be avoided, and if applied should not be allowed to remain more than two hours. Opiates should not be given when there is excessive secretion in the bronchial tubes, without being preceded by an emetic. The treatment of capillary bronchitis should be sustaining. There is a great tendency to prostration, therefore emetics or blood-

letting are inadmissable. In robust children of good habit; over two years of age, with face tinged with red blood, you may draw one ounce of blood or double the quantity. The air of the apartment should be kept moist. The inhalation of steam is very highly recommended, especially in those rare cases; where there is false membrane it will have a relaxing effect, and will loosen the membrane, and by the aid of expectorants it may be ejected. An oil silk jacket should be worn continually, and so as to completely cover the chest When the sputa become profuse, and thick, stimulating expectorants come into use. An important point is not to allow the patient to lie on the pos-

than longer than two hours, the danger being hypostatic congestion, which more probably will result in pneumonia, which is almost inevitably fatal. Careful attention should be given to the patients strength, and if it begins to flag, stimulants should be used, and not sparingly, for patients in this condition bear an astonishing amount of alcohol. Mercurials have no specific effect on any form of bronchitis, and should be discarded with one or two exceptions, for instance in malarial districts, a mercurial to purge gently will be of great benefit; also in case of bronchitis attended with obstinate nausea and vomiting, calomel in grain dose repeated two or three times will often give

immediate relief to the annoying cough.

Chronic bronchitis, should be treated by good warm clothing, and counter irritation.

Flannel should be worn winter and summer. Avoid vicissitudes of weather. The hygienic rules should be insisted upon

University of Maryland
School of Medicine

Thesis of Robt Gaskell's

Feb 1873

The session is now drawing to a close and soon if I could consistent will like many of my Colleagues with me, be thrown into the world alone. No longer will we have upon guiding hand to help us or tell us as often we err. Medicine is too vast a field for us to think or arrogate to ourselves the short time we have been with You, we should know much about it; But we should remember our task has just begun and that we must store up as we go along not only the valuable researches of former times, but those that are daily presenting themselves to the Medical world for surely in no Epoch in the —

history of medicine from the days
of Asclepius has there been such rapid
advances in the science. Indeed we as
young physicians starting in the world
have no assurance in the way it
is progressing from day to day, but
that many of the theories & remedies
you have installed in us under your
leadership will before many years shall
have rolled around become no longer a
thing to be remembered. On the other
hand the things you pointed out
to us as being old and no longer in
vogue, may before we grow much
older again come into use, as for
example calomel and bloodletting

which at one time was in most all affections resorted to, now is seldom used and scarcely ever talked of. Mention it to the young practitioner and he ignores you, mention it to the civilian and you stable him. So it goes and if we after leaving this course of lectures lay aside our books, and rely on what we have learned in so short a time, science will soon find us in the back ground, so far indeed we will never be able to overtake her. This we as physicians should not allow, for the reputations of ourselves & the good of our patients. We are

to frame I fear apt to adhere to
the doctrines of our forefathers, and
follow exclusively the dogmas taught
us while young; thus disregarding
the many useful things of impor-
tance doing on around us.
But it would be worse than all
if we should unreasonably devote
ourselves to any one partic or
principle. A physician of this kind
would rather do injury than good
to his fellow man. On the other
hand we should strive to procure
& gather our knowledge from
all quarters of the globe, which is
the result of direct experiment—

and Extract from them which in each particular case is required. This is also an important point and adds greatly to the sucess of a surgeon or physician. After having a knowledge of Surgery and Medicine is to know when and how to apply it, for in striking at a disease he may sometimes strike his patient.

Medicines are but the hand-maids of nature, then in themselves seldom cure, but in the hands of the unskillful oftimes kill. We should always bear in mind that all our skill consists in aiding nature in her work, to support her when weak,

restrain her when violent; and
aid her when inclined to err. —
Nature of herself strives to heal all
diseases, and cure all injuries; so we
must be careful how we tamper with
her; do nothing against it if we know
not how to assist her. No one
even when he has expended all his
skill in a case of pneumonia for
instance can say he cured it; or
if he had done nothing it would
not have gotten well itself. Some
diseases we know the vis-medic-
atrix naturae is hardly capable of
effecting a cure, then the surgeon
or physician gives a helping

hand and so together they heal.

Conservative Surgery

As my subject I have taken surgery, not indeed that I am more familiar with its principles, than I am of medicines in the cure of diseases, but because I am living on a line of the railroad where daily accidents are occurring, sometimes slight but frequently of no extensive character. It will then be incumbant on me if called to know when and how to act. The accident has occured the unfortunate man is lying before me, lay with a Compound

fracture of thigh, with lost parts
Comminuted lacerated & torn being
run over by a car. The spectacle is
at first appalling especially to those
standing around, and also to the
young and inexperienced surgeon.
At first the thought strikes him
the leg must come off, and to the
last nothing it seems could possi-
bly be done. He should not listen
a moment to those standing round
him, but should proceed at once
to the Examination of the patient
and extent of his injury. We are
aware if we estimate for an injury
like this so horrible in its aspect

and with such an abundant amount of blood lost; Even if the patient does die it is no more than the public expect; while if he should recover, You have the chance of a great eclat, and Your reputation as a Surgeon may be forever established. Afterward we see the man going about he may be perfectly well satisfied, but we will often ask ourselves if nothing else could have been done to have saved his leg, and if we had not done an Operation on the impulse of the moment that might have been avoided, and by using conservatism

might have saved the mans limb.
Surgery is divided into Dynamic &
Mechanical. To the former an attention
should be more particularly drawn
for it is that I think the success
of a surgeon in a great degree rests.
The Patients were well acquainted
with the mechanical laws of surgery,
So we should account for the prob-
able annual numer of deaths in these
days not exclusively in the manner
in which they operated but more
especially to their after treatment!
It is in this particular which
distinguishes the modern from the
olden surgeons. While they used

them selves & ointments and Covered the whole limb from view; we on the other hand use the mildest & lightest dressings we can procure very often none at all, leaving as it were all in the hands of nature. At last we have learned to know that she by her intrinsic efforts will effect cure, where then to often failed. Surgeons sometimes think they have much the advantage over the physician by seeing their work around them, in many respects they can console themselves on their points and say with certainty unless by their timely aid and assistance

death would have inevitable resulted.
But in many cases we cannot help
thinking if we had used conser-
vation the same result & even at
times better, would have been estab-
lished. I must return to my case
again and make up my mind what
I shall do under the circumstances.
After examining the leg if I find
all the main Arteries and nerves
destroyed it is useless for me to
use any means to save the limb
and the sooner Amputation is resor-
ted to the better. But if instead
I should find the vessels & nerves
uninjured the fracture not close

to a joint, when taken into Consideration give me good grounds for delay in the Operation, Especially if it has happened some time after the injury has occured, when already inflamatory fever has set in. This must partly account for the great mortality in secondary amputations in military practice. Not being able to amputate at first, we do not wait until this fever has entirely passed off. It is true I have taken a long and tedious course and may still have to resort to an Operation, but what is this to a young man of Courage

and lively disposition, he will if
necessary undergo most any course
of treatment, if any show can be
had to save his limb.
I would in the first place clense
the parts thoroughly from all foreign
bodies that may have became ground
and imbacted in them; and however
trivial a cont[illegible] a flap of skin may
be, it should as a rule never be sep-
erated provided it maintains any
attatchment at all to the neighbour-
ing tissue but always replace it
with the expectations of its grow-
ing and becoming again united
with the rest. Cases are of the mot

with when fresh have been
torn off have been replaced with
good results. If any loose fragments
of bone presented wound remain them
with flies. Placing the limb in
the most comfortable position, &
use simple wash dressing, give the
patient good food at first, nothing
but what could be most readily
digested, plenty of fresh air, and
will then with out the result.
If it turns out badly I am not
to blame, for while I find second-
ary Amputations more fatal in mil-
itary practice it is reversed in
civil. If I am to operate at

last it is then one of the most difficult points to know when it should be done. When mortification or gangrene sets in, it is also a question if amputation should be at once resorted to, or should we wait and see if a line of demarkation will form; I rather think it is wrong to amputate when it is in progress, we either take not enough off, or go to the extremity of the limb to avoid it, & by so doing we jeopardize the patients life. Under proper surgical management in civil practice the line of health will

of the in many cases sown. No one will agitate for hostile when quarrel is in progress, but should wait until the wound is separated from the dead. Time will not do likewise when caused by other injuries. If after waiting some time I find no inclination for the bones to unite, and the patient becomes gradually worn out by nature's efforts to heal them, then amputation comes in as a most valuable remedy to remove the source of irritation which is the cause of the wasting discharge. By removing this in time and

seizing upon the mood in which the constitutional action is assumed, the life of the patient will in all probability be saved. The results in such injuries after secondary amputations being often unfavorable, provided we are not ever anxious to save the limb and wait until the constitution has been racked by whatever produced by the profuse suppuration & necrosis of the bones. Thus the surgeon must be all means watchful and upon his guard before such grave complications arise. But in examining the leg and finding amputation

necessary the question may arise what-
operation is the best. To this we have
no fixed law to be guided, and the
superiority of one mode over another
is not borne out by statistics. Of
late the flaps the flaps has become
more fashionable among our medical
surgeons, the circular like blood—
letting being almost abandoned.
The advantages claimed for it being
1st a much quicker mode of operat-
ing. Now this before the introduction
of anaesthetics would have been a
most valuable advantage in its—
favor; for before the introduction of
this agent manual dexterity with-

with- & speedily seemed to be the aim
of the surgeon, also being a valuable
means of saving the patients life.
Now this is no longer such a special
object- when Chloroform, or Ether, is
used to see in how many seconds
or minutes it takes him to amputate.
But he should in all cases try and
have a nice looking stump with
the soft parts fitting each other
so as to cover amply the end of the
bone. This we can procure by either
operation. The second advantage claimed
is that it makes a well cushioned stump.
But we find in a short time nature
does not require this, and gradually -

she will take it all away, so in 9 or 10 years we are unable to see within it was done by Circular Cervical. It heals by first intention all we want is skin for union + not muscle. These taken into Consideration I see no special advantage in making it instead of the flaps. Before operating the Surgeon must make all necessary preparations: he should have at least two good persons to assist him. One to administer Chloroform, the other to hand him Sponges and the instruments he requires. The different modes of administering Chloroform I shall not mention, by taking a towel and making a funnel is all that's required. This agent is one

of the greatest boons conferred on mankind in all painful operations, and where much shock is produced it should in all cases be used. Questions have been raised against the use of it; since showing the mortality after amputations being greater than before its introduction. Others, proving facts to the contrary which I think is nearer the truth and no large Operation should be done without Calculating well the one on whom you operate, unless he positively refuses.

The point where to make your incision is often questionable being different in various cases. In the case I have before me

I will amputate a little higher up than when first called, as the parts around may have suffered from the continued irritation of the fractured bones. I would be very careful not to go an inch higher than would be necessary, for it naturally increases the mortality the more we get to the body. Hence to save the patient we must save as much bone as possible & neglect to this precaution will be a cause of great danger and one we must constantly keep in view. The leg after being removed should be raised the head a little elevated. The tourniquet should be placed over the main vessels

at first gently turned, not tightening it until you have skin fairly dissected and turned well back. The surgeon should then make bold sweeps with his knife coming right down to the bone; the soft parts must then be kept out of the reach of the saw by means of a retractor, so that it will not lacerate the muscles, and imbed any saw dust which may materially injure union by first intention. The portion to be removed should be held firmly by the left hand of × surgeon, while with his right he should make communicating with the heel of the saw make light and rapid sweeps.——

should the division be made irregular and splinters of bone left; they must be nipped off with the pliers. After the limb has been removed the first thing to be done to arrest the hemorage. This may be done in various ways by ancupressure, torsion, or ligation; the latter being perhaps the best. Different kinds of material have been used for this purpose, all claiming certain advantages over the other; none being better perhaps than well waxed silk. This should be passed under the bleeding vessel and drawn tightly the intention being simply first and to occlude the open mouth; but to break up the inner walls of the artery and

by contracting the edges commencing
at the top and terminating
previous to passing the humerous. All
vessels requiring ligation should be
done in like manner regardless of number.
We should not I think immediately
close the parts after ligation, but
should wait an hour or so to see if any
vessels escaped notice, finding all hem-
orage secured we may put so many
points of suture as will hold the
parts together properly; one end be-
ing cut off the other being drawn
out the most dependant part of the
flaps, strips of adhesive plaster
may be put between the sutures

not however entirely covering the patient opening at least should be left for the escape of the discharges.
Union by first intention is always hoped for, but seldom seen. After this it should not be disturbed for a few days, the dressing being simply a thin piece of cloth dipped in cold water containing a little Carbolic acid.
In all these operations the success of a surgeon depend mostly on the Constitution and hygiene management of patient. The place in which its done! You cannot expect a surgeon to cure a man with a simular accident in a densely crowded —

hospital as readily as in a pure country air. We read of success here & failures somewhere else. An instance of this kind occured in Boston some time since. When gold had been galvanized for three times successfully, whereas in other hands it had always failed. Was this on account of the atmosphere or was it because it happened in Boston? I cannot say.

Respectfully Submitted
To Faculty
R Gentle

1873

Transmitted with
Wm. S. Maxwell.
Still Pond.
Md.

To the Secretary of the Board of Health.

Gentlemen: In regard to the
with Intermittent Fever, I have chosen it
as a text for the lecture
with the following remarks.

Intermittent Fever, Remittent Fever,
Intermittent [illegible] is a disease characterized
by its frequent periodically returning attacks
and by the absence of fever between the
paroxysms. It is generally confined to
the lowlands of marshy districts and
[illegible] regions. The intermission is the distinctive feature of the disease and is the
period between the end of one paroxysm
and the beginning of another paroxysm.
There are three distinct types of this disease
the quotidian consisting of [illegible]

[illegible] quotidian, the tertian with [illegible]
every other day, and the quartan [illegible]
[illegible] recurring every fourth day.
[illegible] such as the [illegible]
[illegible] may have a double
[illegible] [illegible]
[illegible] double tertian with [illegible]
[illegible] occurring at [illegible]
[illegible] on alternate days either [illegible]
[illegible] occasional, this is a common [illegible].
The [illegible] may vary, either
earlier or later,
Symptoms. The attack may or may not
be preceded by the usual [illegible]
[illegible]. There may be general [illegible]
[illegible] in the epigastrium, which
[illegible] has a longer or shorter

c. the attack may come suddenly or gradually
it may be mild or severe & is rarely fatal.
The paroxysm consists of three stages, c
viz: the cold stage, the hot
The cold stage may be so mild as scarcely
to be noticed or it may be so severe as to
endanger life at the commencement.
There is usually a sense of chilliness at first
in the back, teeth chatter, surface is pale
and contracted, loss of appetite, headache
(frontal) nausea and vomiting may be
present; urine pale and scanty, hairs of
head, cheeks and limbs, restlessness, delir-
ium may supervene, uneasiness in the
epigastrium, the internal organs become
congested if the cold stage is of long con-
tinuance, the average duration is one hour,

If reaction does not take place within the
proper times, the patient grows worse, putre-
faction ensues, the sufferer gradually
sinks and death is the result. Generally
in about one hour the cold gives place
to flashes of heat; the face is flushed,
the surface becomes dry and hot; the
pulse rapid and heightened, tongue
dark and frequently exfoliating vesicles,
great thirst; nausea and vomiting ordin-
arily, though the bowels are generally con-
stipated, temperature often rises to 108, the
tongue is usually coated white, but in the
delirium, convulsions often occur in
children. If the disease assumes a malig-
nant form great prostration supervenes.
The stage generally lasts from three to

eighteen hours it is followed by a chill of symptoms, the sweating becomes more, and the patient is restored to health for a time with a feeling of debility &c. The return is at the usual hour, or even a little earlier each day. The disease may become milder, it may run into the continued form of fever. In the malignant type the symptoms above described become more violent, there is great debility &c. One of the stages may be absent. Among the complications are enlargement of the spleen, [illegible] becomes congested. [illegible] is very often left by [illegible] and [illegible] and [illegible]. The duration of the disease varies, it may terminate in a few days, but generally [illegible]

it runs on for weeks and even months.
Where the disease is severe it is liable to
return every week or two, & may be troubled
with attacks one year. Two eight months
and only ceased to them by proving
mother. Intermittent Fever is often complicated
with other diseases, and may usually
be treated with all disease than intermittent
character as we do the disease itself.
Early well marked cases of malignant
remittent & the severer forms,
but in most mild cases there is no such
danger. The intermission is generally
enough to make the disease, & should
be treated as an slight & not severe,
the use of fever at a certain time will
not, & the disease.

the prognosis is favorable. The malignant form is dangerous. I have known cases certain cases every family within my father's practice to be severe with intermittent fever yet I have never known a death from the simple form of the disease.

Etiology. Malaria supposed to be poisonous gases by matter the product of vegetable decomposition. Marsh Miasmata seems to be the most appropriate term for the reason that it is produced in the vegetable particles about marshes.

The vegetation of our marshes are low cultivated by annual showers and warm sunny days to grow about mid-summer, after which being matured by frost, wind or the ebbing and flowing

tide, and spread to the head-of summer decay takes place, fresh germs are produced and disseminated this process are repeated till the beginning frosts of late autumn put a stop to vegetative life. Miasmatic germs may be produced without vegetable decomposition accompanied by heat and moisture takes place. A long continued temperature above 60° seems to be necessary for the production of Miasmata. Intermittent Fever is most prevalent in autumn and about marshes. Wind seems to be a great disseminator of miasmatic germs. Districts comparatively free from malaria are sometimes visited by it in consequence of some thing being brought by the wind. Malaria are believed to be the

remote cause of disease, requiring sudden exposure secondary to living unsanitarily. It is only by considering predisposition as remote cause of the disease that we can account for all cases of intermittent Fever at seasons of the year when there is no malaria being produced. The poisonous germs may be stored up in the system unchanged for weeks, breaking forth with violence when once aroused.

Treatment. The child is to be treated according to the use both external and internal of agents that will restore the surface to its normal temperature, hot-douches internally, hot-applications to the surface, if very nausea and vomiting, the fever must be checked if possible, during the

must stay the patient should never be
exposed to the cool air.
The sovereign remedy in this disease
is the Sulphate of Quinine; it is given in
every stage of the disease being careful
breaking up a fever it is often given in
the hot stage. It is well enough to omit
during the intermission, when it is to be
given so as to get between paroxysms
the cold paroxysm. The administra-
tion must be commenced
with a free dose and continued in large
doses until the patient is out of danger.
The Sulphate of Quinine acts to the
good that which it has been deprived
of by the malaria. If the bowels be
constipated, the tongue much coated, stom-

deficient in bile, a mercurial may be used such as calomel or the blue pill five grains to one or three times followed in the course of a few hours by a dose of oil or salts, but where purging is not to be encouraged, I do not believe in the indiscriminate use of mercury in this disease. I have been induced to prescribe it where there were no indications for its employment: if the stomach be overloaded, an emetic. Next to the sulphate of zinc comes Arsenic, Fowler's Solution in doses of from five to ten drops three times a day will check the disease, but Quinia will in the majority of cases do the work. If the stomach be irritable the Quinia should be used by the hypodermic.

After the passengers have been shorted the Eunice should be sanitized or vented to about the seventh day, however times by doing this a return is prevented.
If the patient be left in a debilitated condition he must be employed, Eunice and him with good food &c. In winter use it is best to use Eunice habitually during the summer and autumn, & in case of Eunice with exception Eunice Sulphur taken very morning will be -ve to others, it must be kept in a cool dry air, and all clothes should be avoided.

Case. On the morning of last September 7th, my father sent me to see John Greene

a labouring man, living about two miles from our house. I found Green in a fish hut on the bay shore. He was about twenty years of age, had been labouring hard for several weeks, the two last were very violent; he had the day before to leave his Indian wigwam ashore, the chills he had been having were of the remittent type. Green was lying in a semi-comatose condition, pale and exhausted, eyes sunken in the orbits, extremities cold and bathed in cold sweat, vomiting and purging combined of great internal heat; pulse small, tongue furred white, clots of liver and blood.

I gave him three pills each containing three grains Quinia, half grain Calomel

and the third in pound of Prunes. Left-for
Mrs. the Domestic left Pennsylvania and
while here, ordered half ounce Epsom salts
every hour and half drachm Tincture Opium
in the mean while. Mustard Plaster to
the pit of the stomach, mustard and Cat-
hartics to the extremities, ordered ice to
allay thirst. Returned the next morning
found him in the same condition.
Left-him plenty of Quinia and ordered
the stimulants to be kept up. Expired
on the morning of the ninth. From
what he did not get what I ordered
for him, I believe if I had of had a
Postmortem and given him twenty grains
Quinia in a pill, I could have saved his life.

They treated the Mr. Thornwell,
with Pills and Powders but [illegible]

1873

Robt. Toombs Jr
Ga.

Methods of Medical Research

The methods employed in the discovery of the facts and laws that constitute Medical Science when considered in detail, must be innumerable. There are, however, certain principles and methods common to all forms of this branch of science: a brief review of these shall be the limit of this paper. I shall restrict myself to a consideration of the general modes of procedure adopted by medical scientists, including some of the mechanical aids to inquiry.

The first object of study must be Anatomy. The student ascertains the shape and constitution

of each element that goes to make up the structure of the human body, the relative position of the elements, and the change in form and position accompanying growth and decay - This work and record are the simple but important duties of the anatomist. He may bring to his aid the microscope and the test-tube; but these are nothing more than artificial senses, and do not materially alter the character of his work - His intelligence and perception of analogy, however, incline to him relations of shape and function, but the method of these discoveries cannot

is taught, as they are happy suggestions and not the result of direct research. The minute elements of the animal organism ultimately associated with themselves are constantly changing, and every change of one part is felt in a varying degree by the others. Besides these minute changes or molecular motions, there are changes of place or motions of fluids, and changes of form or motions of organs. The physiologist observes these changes and notes their order in time, and the influence which they mutually exert. The investigator not only passively observes but he may excite changes by mechanical or chemical

means and thereby gain a knowledge of the function of parts that were obscure. The study of physiology then consists in observing these phenomena as far as they can be seen in the living body, and morbid, in noting the condition of the various organs immediately after death with relation to agents employed during life.

The function of parts may also be studied by their partial or complete destruction and removal from the body. Hence it follows, that alterations of parts induced by disease may throw light on their physiological nature.

The influence of chemical or mechanical agents in the cure of disease constitutes therapeutics. It includes the science of chemistry, physiology and pathology, and is therefore itself the most complex science. A great difficulty in the study of this branch of medicine has been the want of correct pathological history of disease; in what the effects of remedies were compared with changes due to disease alone. Another source of error was the administration of medicines of a crude form. The complexity of result is simplified by limiting

the agents in number and in one disease, and by the employment of them only of a definite known composition - The influence of drugs on the human system may be frequently inferred from their effects on the inferior animals - The advantage of this mode of investigation is that results can be more thoroughly studied - Changes taking place after different intervals of time may be compared, and symptoms during life may be connected with their corresponding changes of the internal parts. In recording phenomena, accuracy of description

of the utmost importance -
since precision of language is
so closely related to accuracy of
thought, it follows that the medical
phraseology in common use at
any one period of its history is the
best indication of the status of
the science at that time -
As the science advances, the lan-
guage employed conveys not only
a qualitative but a quantitative
signification - To secure this clear
conception, the scientific observer
in his experiments makes use of
definite chemical substances and
forms of force capable of measure-
ment. The results secured through

the different senses are made to
depend themselves in characters adapted to the sense alone, that
of sight. - A degree of heat is appreciable by the hand convey-
ed by a peculiar sensation knowledge. How
the heat is made to act first on
some interposed material that
undergoes a change of form, that
of expansion; and the expansion
is limited to the direction, that
of linear measurement. This appli-
ance constitutes the thermometer -
And so by various other mechan-
ical applications the molecules
and aggregate motions in dif-
-ferent parts of the system

can be clearly heard and clearly expressed - The little instrument called the Sphygmograph is another example in point: The radial pulsations are made to express themselves in characters as plain as words -

The respiratory sounds, heard through the chest walls, highly important as indications of disease become more definite form by the aid of the stethoscope - our knowledge of intercurrent disease has been greatly extended by the invention of this instrument, but this, it partakes of a qualitative nature. Auscultation has

as yet furnished no means, that I am aware of, of analyzing complex sounds, nor of recording them— The pitch of a single sound can be approximately measured by comparison— What is needed to give a definite character to our knowledge of heart and lung sounds is some mechanical device for expressing sounds by linear figures—

Chemistry has given birth to photography, an art of great importance in medical science. A picture of a diseased part is a chapter written in a word and read at a glance;

more eloquent than a thousand verbal descriptions—

Shades of color are indicated by comparison with [illegible] objects of similar shades— But a color, as seen outside the color spectrum, is [illegible] always compound— The elements of a compound color bear a close relation to the molecular nature of the colored body— The study of the colors of tissues in health and disease is a field of medical research as yet unentered upon, which would doubtless well repay the labors of any investigator—

In experimenting upon lower animals for the purpose of testing the properties of drugs, Medicinal agents of definite chemical composition should be employed; and these only will ultimately constitute the materia medica — They are less easily adulterated without detection than crude drugs and are more readily recognised in the tissues — besides the changes which they induce. and those which they themselves undergo are more easily perceived. and lastly, the therapeutic action of a chemical body will frequently point to other substances as possessing similar properties —

Thus far, materials will be found producing as good results as the crude drugs now employed, with the advantages of definite composition and superior purity, and thereby claiming the confidence of the physician, will replace many of the agents now employed.

Another valuable method of medical research is the immediate cooperation of numerous observers; which, as far as I know, has never been adopted. It is true that two men sometimes combine their labors and associate themselves in scientific investigation. But this has

never been extended to the degree that I refer to above a dozen or more men unite in a post-mortem examination of one body, thereby securing the most thorough knowledge of the anatomical and clinical characters special to a disease. One observer might be limited to a microscopic examination of an organ or a portion of an organ; another to the chemical analysis of a secretion, excretion, or morbid product.

The spectroscope might be employed by the observers in detecting conditions not made known by the chemists test-tube.

Thus by a division of labour the complete nature of any one disease, in its varied expressions be ascertained, and to the connection of apparently independent changes become evident—

Another source from which medical science is advanced is the collection of numerous clinical statistics— The characters peculiar to a diseased condition of the body are thus separated from the accidental circumstances: the real expressions of disease are positively known, and diagnosis thereby more rapidly determined— The labours of independent investigators

almost worthless when taken alone
find their value in such a
union; and this co-operation can
be aided by men whose per-
sonal for investigation are
limited — The accumulated knowledge from
all other methods of study can never
have its corresponding influence in one
brain, nor is it necessary — A certain por-
tion of immediately available knowledge, with
the remainder systematically arranged, in books,
is all that is wanted —
The limited scope of a students Thesis here
gives a subject that is really
exhaustless —

Robert Townley Jr

1873

Stansbury, Oscar, Miss.

Sulfate of Quinia

This is by far the most important, and extensively used, of all the preparations of Cinchona bark; and may be considered as sufficient representative of its virtues in most occasions.

This salt is obtained by boiling the yellow or Calisaya bark in water acidulated with muriatic acid; by this process the alkali is seperated from the kinic and other acids which are present, and a soluble muriate is the result; by the addition of lime this salt is decomposed, and quinia is precipitated; it is then seperated from its insoluble impurities by being digested in boiling alcohol; then decolorized by means of animal charcoal; after this sulphuric acid is added

Sensible and Chemical Properties.

Sulphate of Quinia consists of white silky, mi-
croscopical crystals, which are inodorous very
bitter and slightly efflorescents. It is very
slightly soluble in cold water, more readily
soluble in boiling water requiring about 740
parts of the cold, and 30 of the boiling, to
effect a solution; it is also soluble in al-
cohol, requiring about 60 parts to produce
a solution. The solution is very easily
obtained, by the addition of any of the
sour acids to the water; the aromatic
sulphuric acid is most commonly em-
ployed for this purpose.

The opinions are held in regard to its
Chemical composition; one that it is a
neutral sulphate, containing one eq. of

the acid, and one of the base; the idea that it is a disulphate containing one of the acid, and two of the base, was formerly entertained in regard to its composition, but it subsequently gave way to the latter, but at the present time, I think most Chemists are of the opinion that it is a neutral Sulphate, consequently, the name that has been employed for so long to designate this salt is correct, and should be retained.

Incompatibles. Sulphate of Quinia is decomposed by the alkalies, their carbonates, and alkaline earths. It should not be administered with any astringent solution containing tannic acid, and

the soluble salts of lime and lead, the salts of oxalic, tartaric, and gallic acid, occasion more or less precipitation in a solution of Sulphate of Quinia without excess of acid.

Adulterations. All the effects of adulteration may appear, in the least possible amount of water, which the Sulphate of Quinia may contain, without any alteration in its sensible properties. This may be demonstrated by, by leaving the Sulphate of Quinia in a very moist atmosphere; it will always increase in weight, this additional water can be expelled by the application of heat at 212° F.

Tests for Sulphate of Quinia.

The best test, I think is to add to a solution of Chloride of Platinum to the liquid suspected to contain the Sulphate of Quinine; followed by the addition of water of Ammonia; if the Sulphate is present we get an Emerald green colour and in some cases a green precipitate. If before the water of Ammonia is used, a concentrated solution of ferrocyanide of potassium be added; a dark red colour is the result this last for some hours but eventually passes into a green.

Effects of Sulphate of Quinia

When this drug is given to a healthy person; in doses not exceeding from 5 to 8 eight grains daily, it seems to exert

the same effect as a single bitter that is after it has been continued for some time the appetite commences to increase the pulse becomes somewhat full and stronger if not accelerated; the temperature is correspondingly increased and the process of blood making and nutrition seem to be notably increased; in other words it appears to act as a tonic when in much larger doses than the above it appears to produce a marked influence on the brain; the power to produce this effect differs in different individuals; some evincing a marked susceptibility to its influence others are able to take the largest doses without any apparent bad results

The first evidence we have that the system is acting under the influence of the drug after its administration is the singing, roaring or tugging, we find in the ears, with the hearing [illegible] diminished; and if very large doses have been given that dizziness is the result; uneasy sensations in the head, sensations of weight and fullness, sometimes pain though this is seldom severe, the circulation is not much if any, affected sometimes increased sometimes diminished. In extremely large doses this actual poisoning may be produced. It has been found in experiments on dogs, that animalcules may be produced, when large quantities

are given. The evidences of this treatment
may be a reduction of nervous
power such as diminished sight and
hearing;
It has been supposed by some, that
Opium renders the blood more thin and
lessens its coagulability, by diminishing
the proportion of its fibrine; for in
some few Cases where death has occur-
ed during its administration, the
blood has been found fluid. This
in all probability was due to the
case and not to the opium
It has been found under most ex-
tensive experiments it not quite the
reverse; that is not to diminish the
coagulability, but to increase the fer

portion of the fibrin.

Dr. Ross has asserted by some, that quinia produces a direct influence on the spleen in cases where there is enlargement of that organ; but I am of the opinion, that its action in these cases, is secondary;

If the theory that the enlargement of the spleen, is such enlargement, caused by the malaria producing paralysis of the vaso motor nerves, consequently more than a normal amount of blood is admitted to this organ; be correct then the action of the quinia must necessarily be secondary, for it acts by restoring some important principle

Milk has been destroyed by the mal-
aria or in some other way not as yet
fully understood. In case of the
anæsthesia being removed the nerves
resume their healthy action.

Medical Uses and Therapeutic Appli-
cation of Sulphate of Quinia.

Sulphate of Quinia is used most
successfully in those cases character-
ized by periodicity, as a prophylac-
tic, and tonic in malarial fevers.

It however often happens that in
place of benefit when a single tonic
is called for; such as Compound Gen-
tian; commonly known as Hoffmans
Anodyne, the disease in which the
Sulphate of Quinia is most signally

remittent are intermittent and remittent fevers; the pernicious forms of these diseases, and the above named diseases the quinia acts with such promptness and efficacy that it has become to be regarded as a specific in these affections. In cancers of the uterus, including fungus cerebri, sarcoma, meningitis, the salts of quinia are resorted to with the abundant alcoholic stimulation and nourishment. In yellow fever, the declining stage of typhoid, the malignant pustule, gangrene, malignant carbuncle, extensive suppuration, the typhoid forms of diseases generally, scarlatina, [illegible]

acute rheumatism, diarrhoea, dysentery, cholera, and various disorders of the nervous system; neuralgia, tetanus, chorea, and also certain forms of pneumonia.

As we have before stated, the best state of opinion is most commonly employed in the treatment of intermittent and remittent fevers, consequently the therapeutic application of the drug in these cases must be limited of course to some length of time, years back, before quinia came generally into use, or before it was well understood some forms of intermittent fever were extremely embarrassing to the physician, and an obstinate quotidian was scarcely

was dreaded than pulmonary consumption, the only requisites to success, is the administration of a sufficient quantity at the proper time, & the administration of quinine we do not think as was formerly the case that copious injections is necessary; when it be in those cases when the drug does not seem to act with sufficient promptness its administration may be preceded with a small dose of Calomel, to unload the portal circulation in order that the quinia may be absorbed more readily; perhaps it would be best to insure success to administer a mild cathartic along with the quinia

or just before it is given. Much has been said in regard to the time in which the Quinia should be given. Some give it at all kinds of the disease without regard to Apyrexia or Apyrexia, We think the right time for its administration is during the intermission, unless it be in the remittent form of the disease when it is of the utmost importance that the approaching paroxysm should be prevented, and there is reason to apprehend, that the intermission will be too short for that purpose.
As regards the mode of giving the Quinia in case of intermittent fever, I think it is best to commence three or four hours before another paroxysm is ex-

Sulphate as soon as the pain subsides in the ordinary quotidian types with twelve grains of the Sulphate of quinia and to be followed with ten grains every four hours after until the time is passed when we expect the next paroxysm. It might be asked why we commence so long before we expect another attack for the reason that it is a noticeable fact, that in most cases the paroxysms have a tendency to occur at an earlier hour at each successive attack. So it becomes absolutely necessary that we should commence in time to get the System thoroughly under the influence of the quinia before the time for next paroxysm. This is the mode of administration

that my father has employed for the
last thirty years with great success.
He is in the habit of combining with
the quinine when it is used as a tonic
either the sesquicarb of iron or the tr
portion of two parts of the latter by weight
with one of former. For instance a
man presents himself suffering with
intermittent fever he has no hesitation
in breaking up one attack but then
soon after return as he is living in
a malarious district. What is to be
done? Direct him to have some pills
made, containing each grain of sesquicarb of
iron, gr ½ of sulphate of quinia and
order him to take one three times daily
and he is almost certain not to have

a remedy so long as he continues the
bills.

Theory of action. It was formerly
supposed, that the sedative effects
noted in cases of intermittent and re-
mittent fevers by producing a tor-
pid effect on the nerves by which
the paroxysms were induced; at
present I think most of the profes-
sion hold to the theory of Dr Bence
Jones. I do not propose to go into a
detailed account of the various ex-
periments he made that led him
to the conclusions he arrived at
for it would be out of the prov-
ince of a thesis of this kind; but
I think it sufficient to state that

in this bill he believe that his opinion would be directly contrary to some important principle in the treatment, which had been recognized, as criminal Quinoidine which had been discharged by the malaria. He must say while his experiments are not absolutely conclusive contain a high degree of plausibility.

From Gentlemen of the Faculty I have endeavored to be as clear and succinct a manner as possible to point out the most important features of this case & the most important articles of materia medica, the discovery of which has been the means of alleviating the sufferings of mankind

its myriads of mankind. I am fully
conscious of its many defects and de-
ficiencies; the limited time and scope
of a Students Thesis is my only
apology.

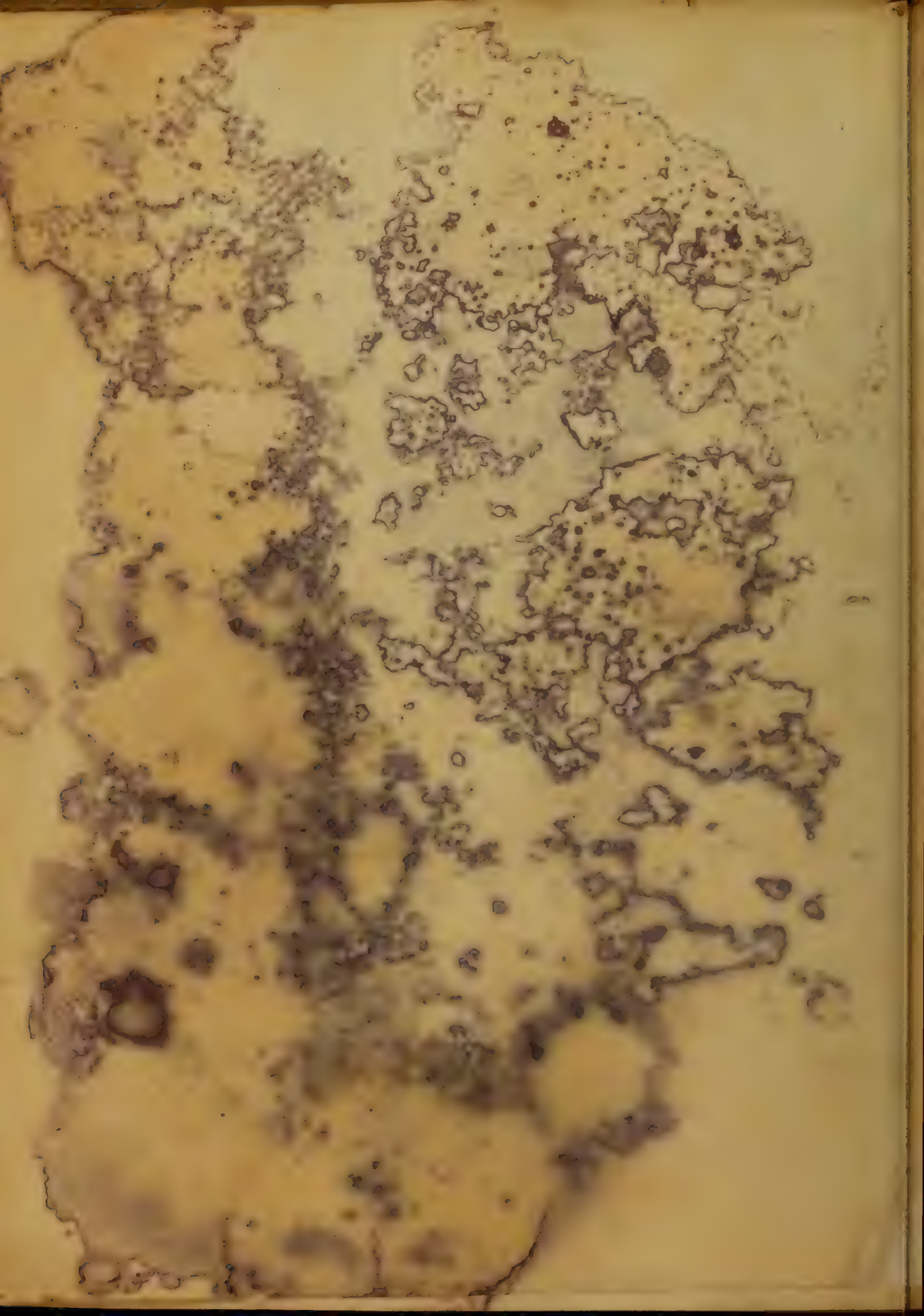
I am Gentlemen Yours
very respectfully
Oscar Stansbury

1873

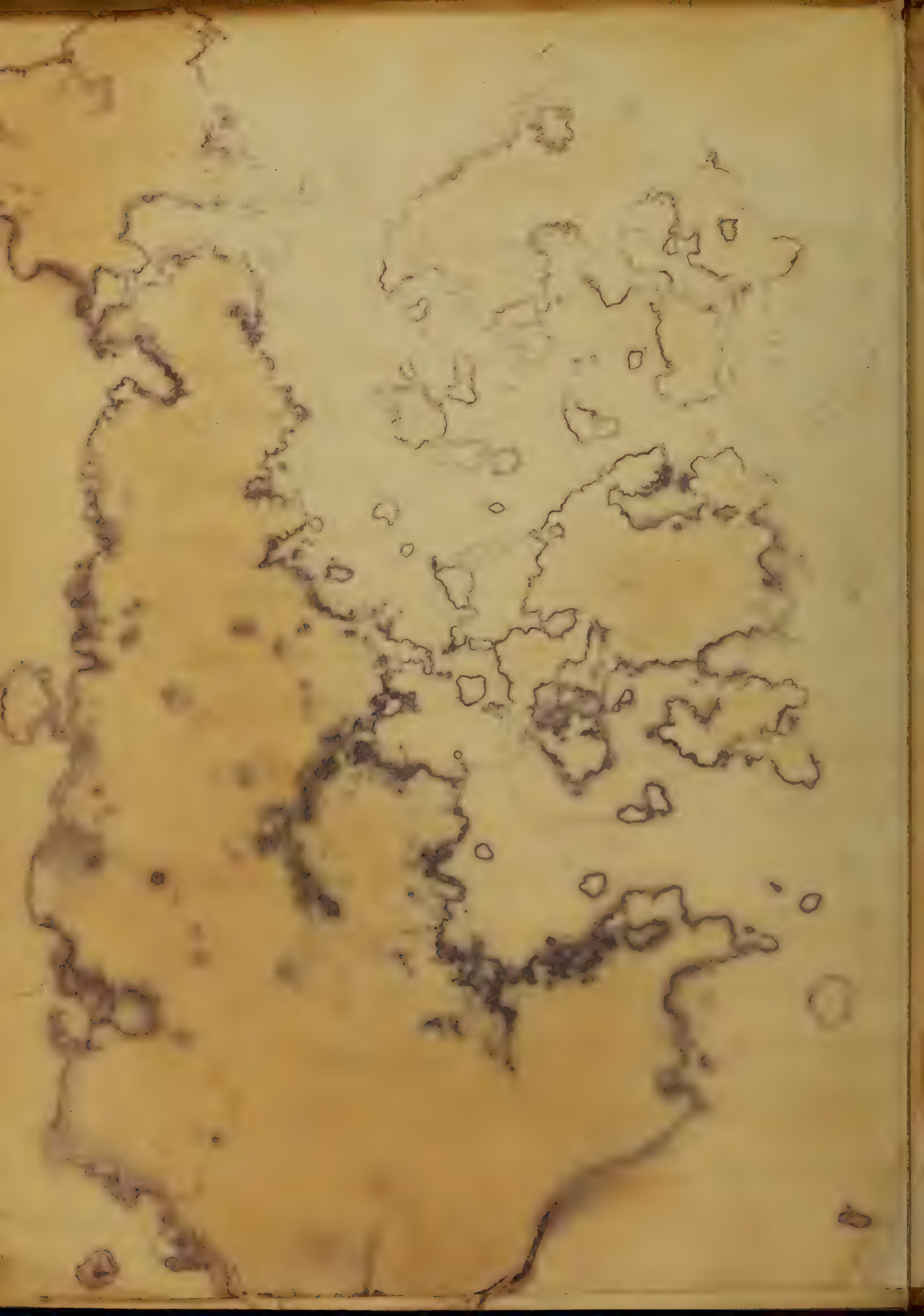
A Dissertation
On
Phthisis Pulmonalis,

Respectfully submitted to the
Medical Faculty of the University of
for the
Degree of Doctor of Medicine,
by
Jos. S. Baldwin
of
Virginia.

1873.



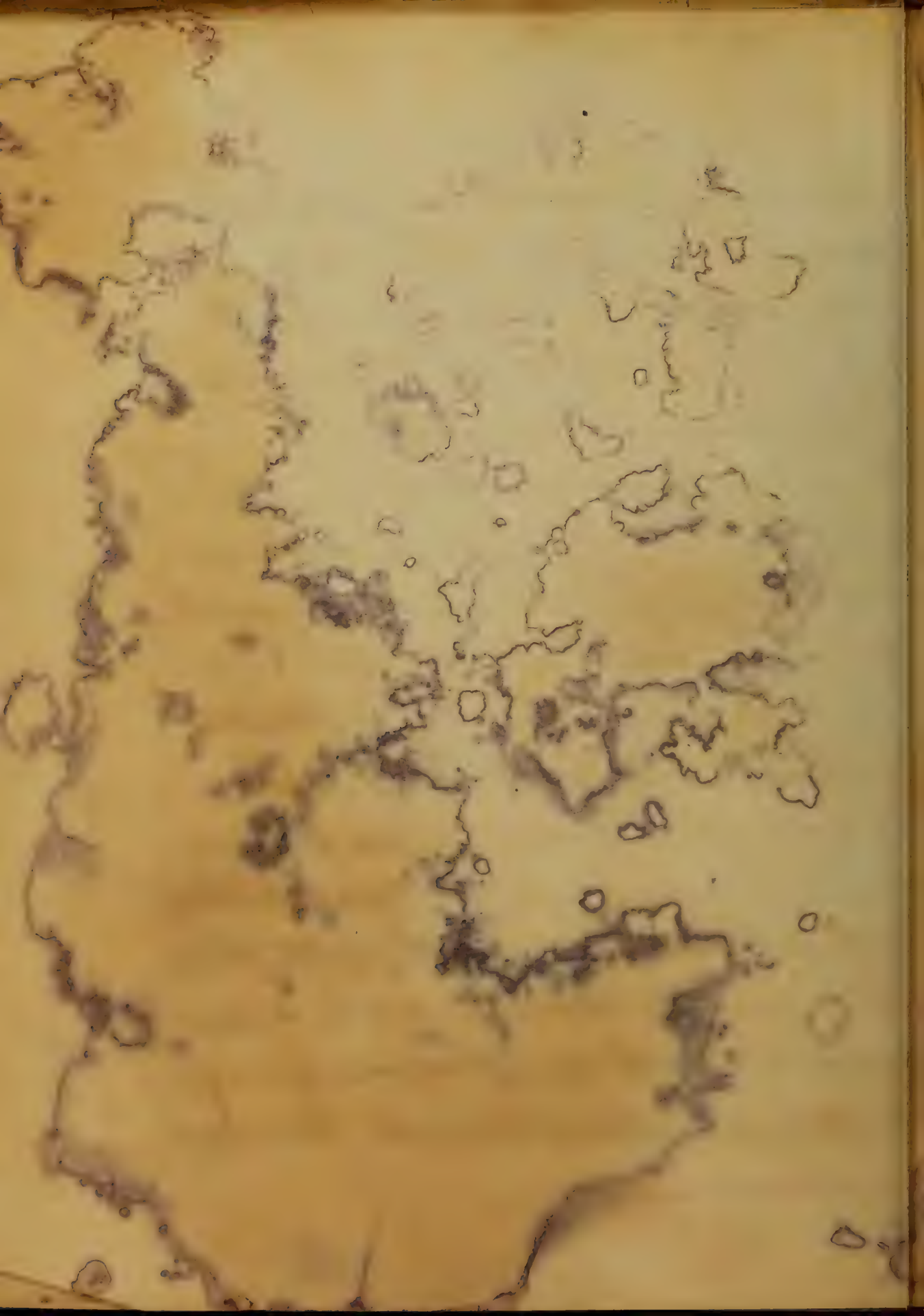
Medicine, in its present status of contradictory theories and practices, is, in my opinion, rather a practical art than a demonstrated science. It is founded on the structure, the functions, the sympathies and the susceptibilities of the human system. The rational and successful practice of this great art, which prevents and cures diseases, mitigates suffering and prolongs life, demands a thorough knowledge of the human constitution, both physical and intellectual, and of the [illegible] laws which govern the [illegible] exactly what [illegible] it to its cause [illegible]



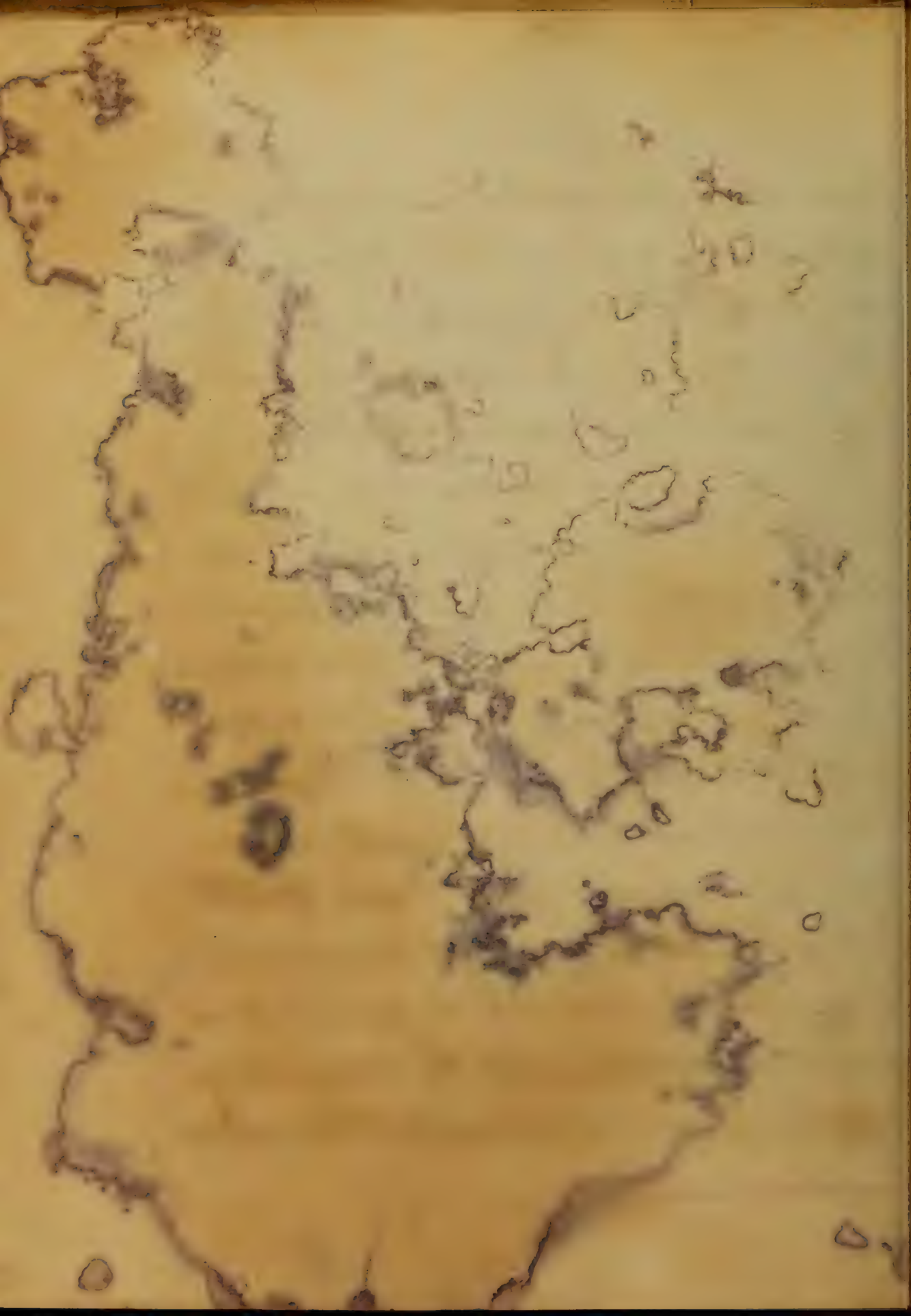
-ply the proper remedy; and what that remedy is can be determined only by a large and varied experience. In this art success is the test of excellence, the most successful physician is the best physician, let his theories be what they may. Pope's pointed remark about "forms of Governments" is much truer when applied to Medicine.

For Schools of Medicine let fools contest, "That which is best administered is best."

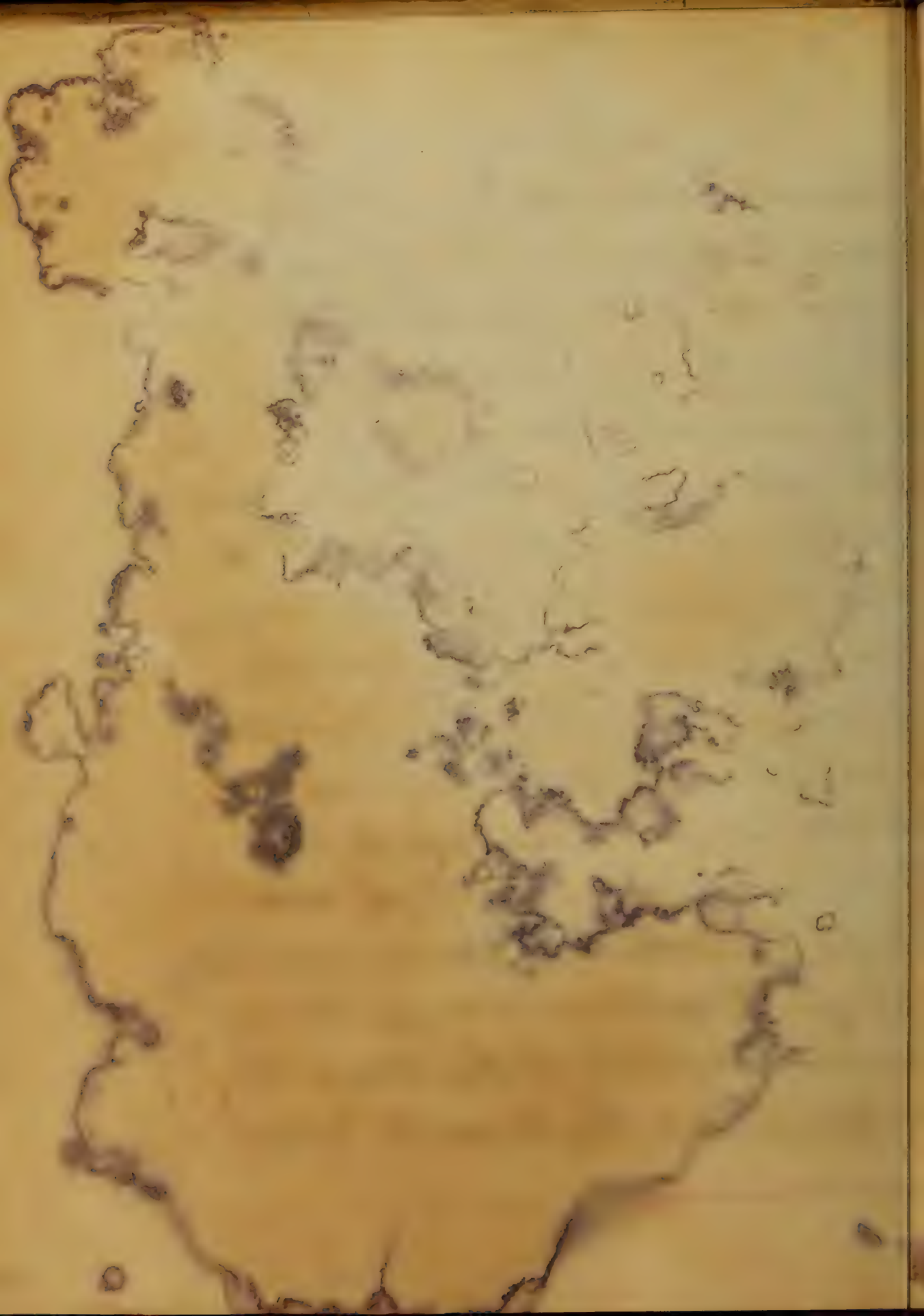
A successful practice on a large scale, must involve a sound theory, altho' in special cases the right practice may be adopted from wrong reasons. Health and disease are not, as many suppose, casual pr[illegible]du-



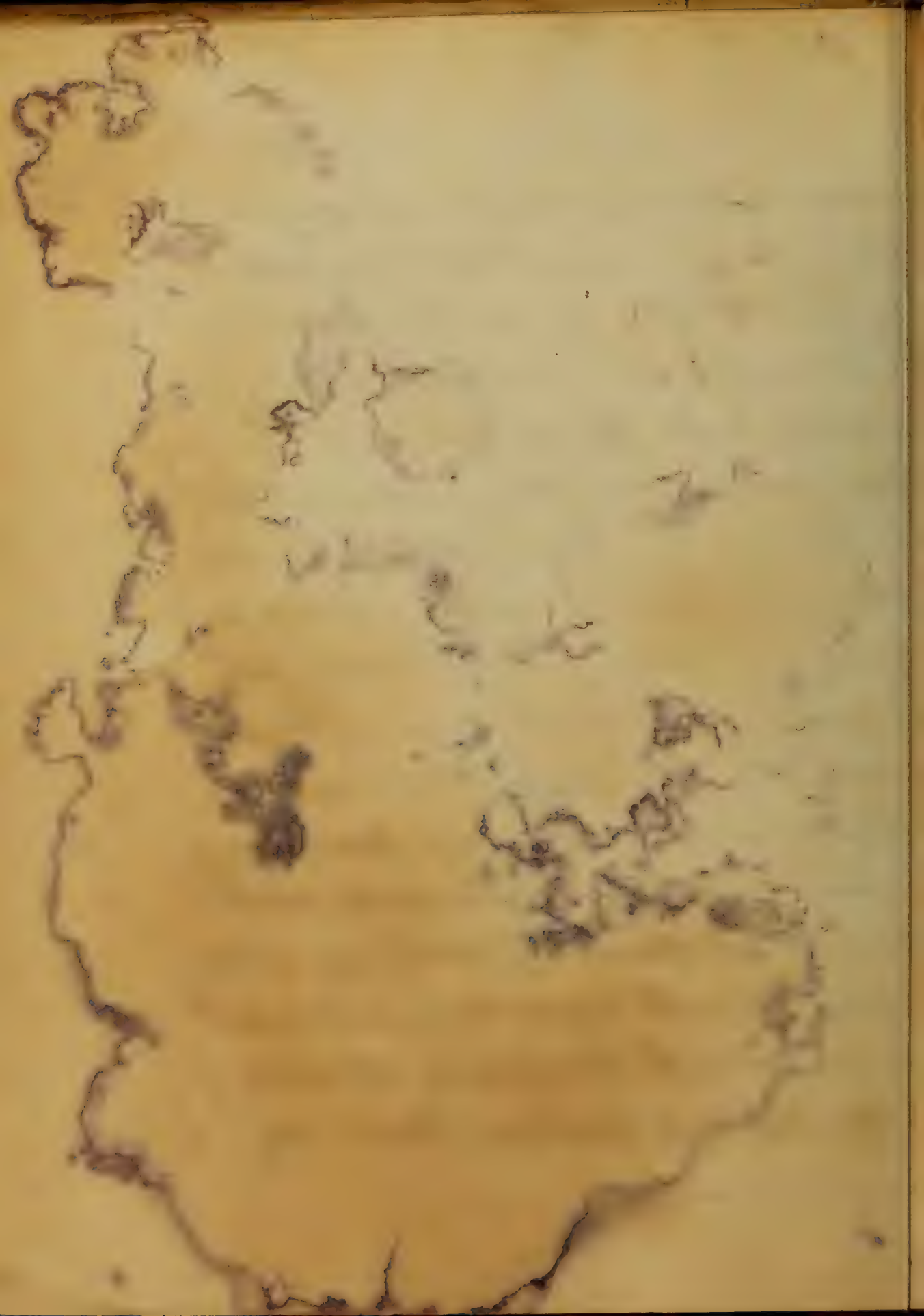
-tial things. They are the natural product of fixed laws, under given circumstances, under certain hygienic conditions, man will certainly enjoy good health, and under other conditions they will certainly incur disease and death. God's boundless universe, in all its details, is governed by fixed, uniform Laws, to the exclusion of all casualty, chance, or caprice; and man's only duty is to study and obey these inexorable, yet wise and beneficent Laws. Those laws which affect men's health fall within the domain of Medicine; which altho' it cannot be regarded as an exact Science, yet, the deductions it makes from accurate observation



observation and experiments approxi-
-mate to absolute certainty. When Med-
-icine was in its infancy, the rational
theory of this branch of knowledge, as
experimental art and
a progressive Science was not under-
stood, and many wild Theories usur-
-ped the place of well tested facts.
An immense improvement has
been made in this respect within
the last century. Visionary Theories
are discarded, and Medicine, like
the other inductive Sciences is now
based on the solid rock of ascer-
-tained facts. To this common sense
test all its doctrines and practices
are now subjected. If they stand the
impartial trial, they become settled



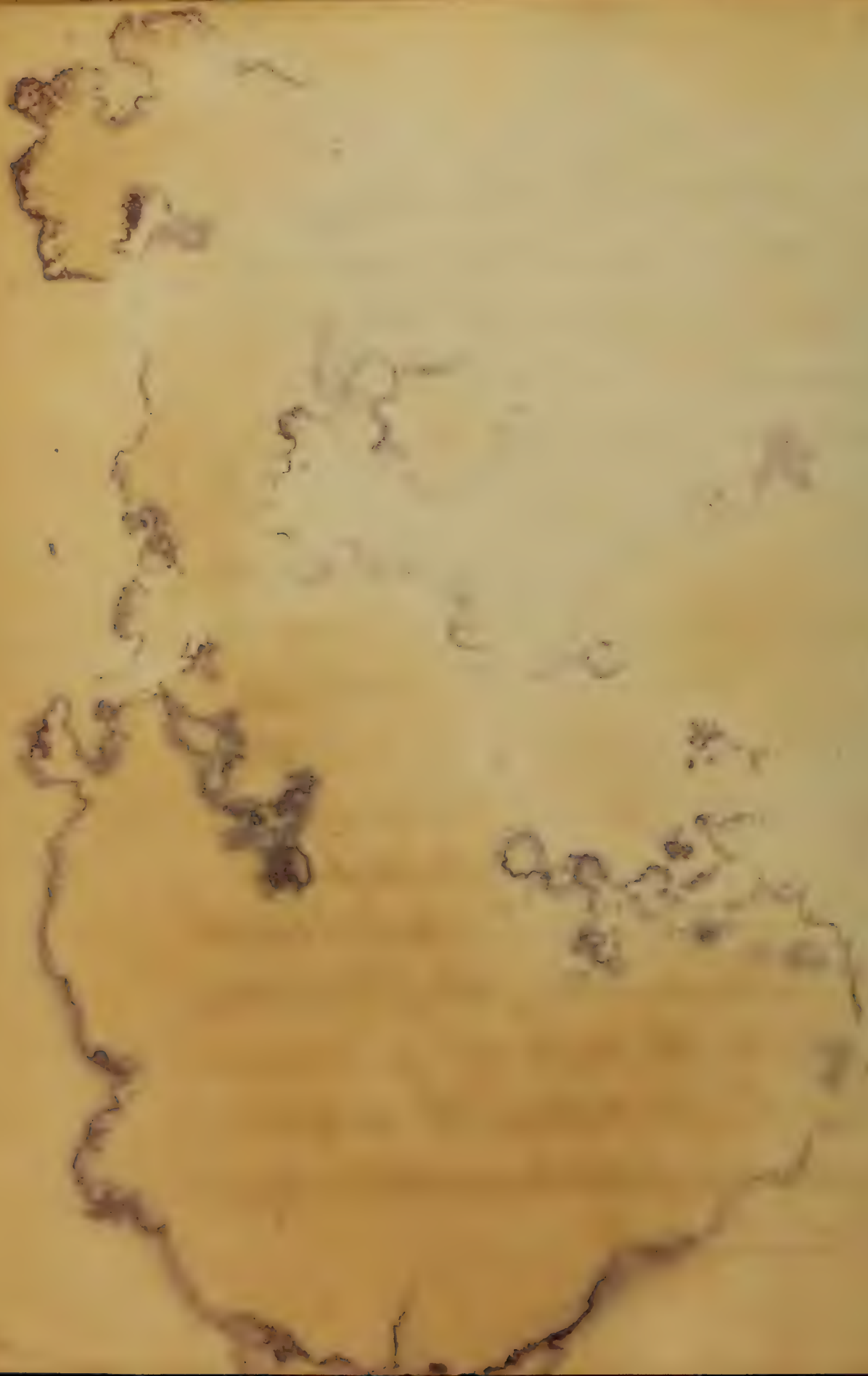
Science; but if Experience condemns them, they are rejected, tho' Endorsed by the Faculties of all the Medical Universities throughout the civilized world. Under the influence of this practical Philosophy, first taught by Bacon, the Science of Medicine has made and is making rapid progress; and to this progress every physician may contribute something by accurate observation of the various cases occuring in his own practice, if he will have the independence and energy to test prevailing doctrines and practices, with rigid care, and report the result with scrupulous fidelity to his Medical Brethren. Hoor the



volume of facts thus collected, superior philosophical minds can deduce by rigid analysis, the true science of Medicine, to which the humblest practitioner, in this way, may be a valuable contributor.

Adopt not wild theories to suit existing circumstances, but state facts as derived from actual observation, and under all circumstances be guided by a high sense of Medical honour and integrity.

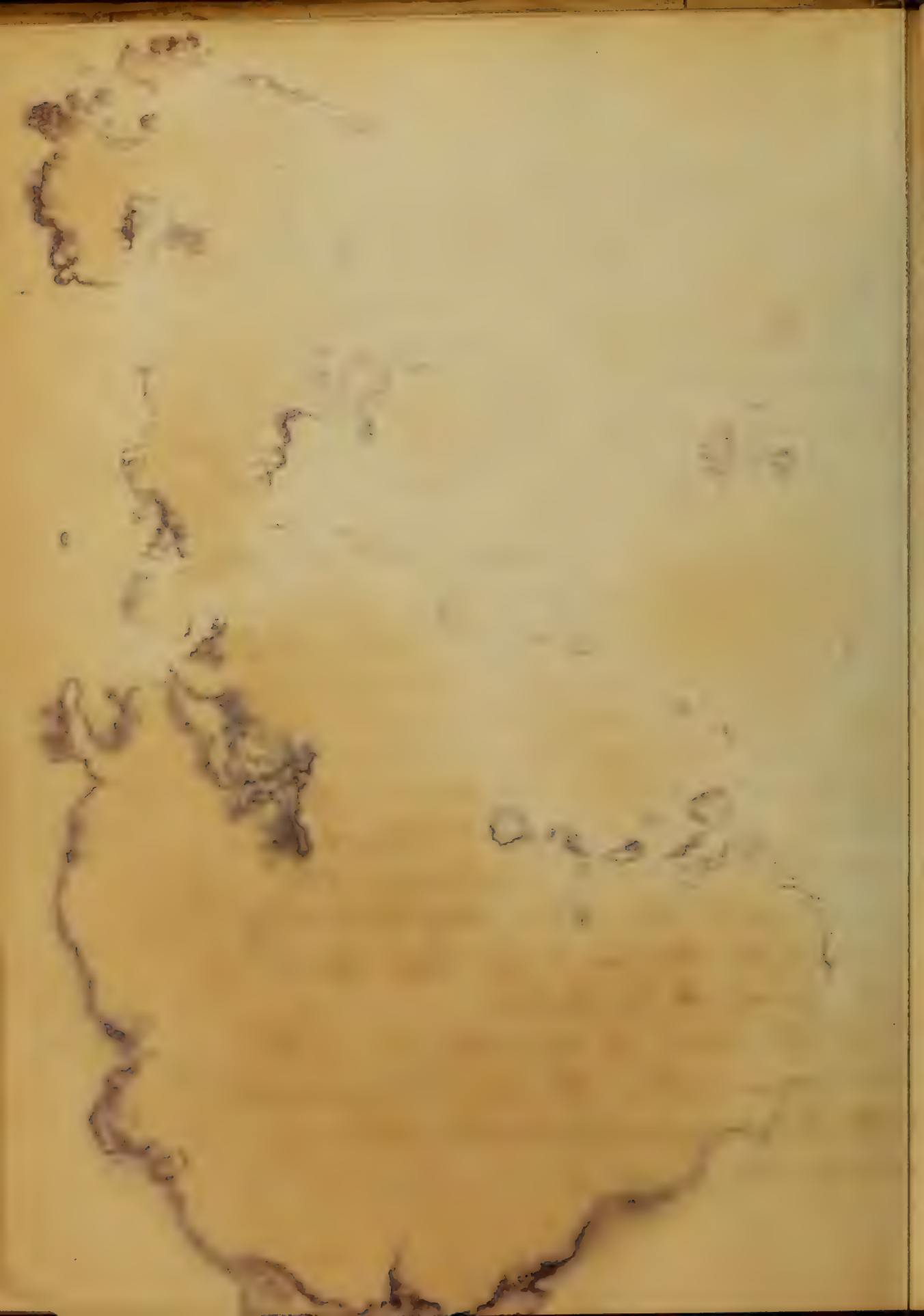
Without further introduction I will proceed to the subject of my Thesis, which I propose to discuss rather practically than theoretically not aspiring to the style of a Laennec or a Virchow, but treating the subject in the rude and imperfect language of an humble medical student.



Phthisis Pulmonalis.

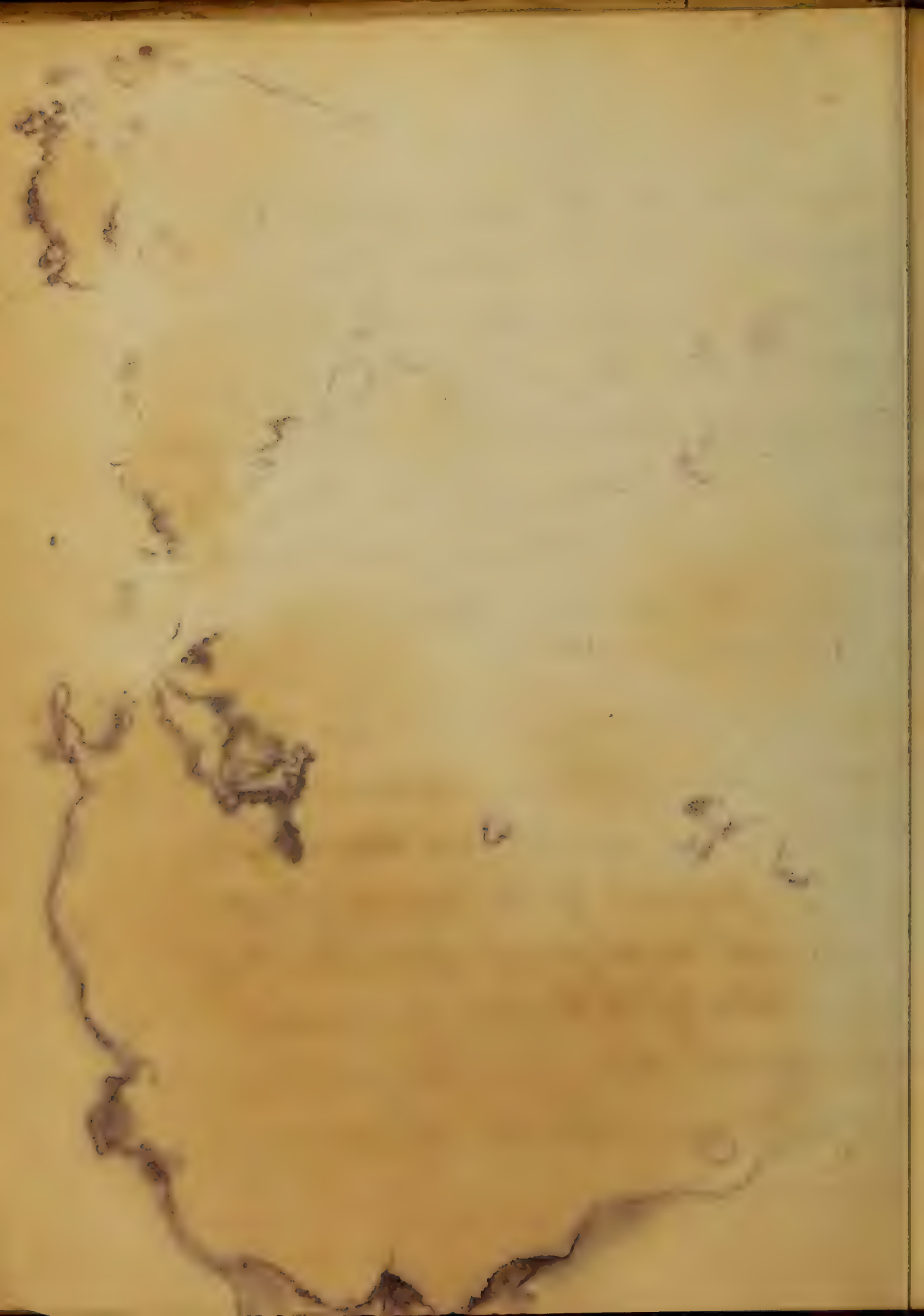
Of the diseases which afflict the human family none occupies a larger space in the list of fatal maladies than pulmonary Consumption. Tens of thousands are yearly swept by this insidious destroyer into their graves. One fourth of the adult deaths in Great Britain and in our Eastern states are attributed to this fatal Malady. In Rockbridge County, Virginia (where I reside,) the mortality from this disease far exceeds that from any other. In its relentless course it spares neither age nor sex. The fairest flowers are often its victims. Its onset is often obscure, and the predisposed patient frequently does not recognize the Malady until the vital spark is nearly extinguished. He has a bad cold & expects soon to be well.

Again, its onset is sudden, and the rapid Emaciation, the distressing night sweats, the painful [illegible] the annoying cough, [illegible]

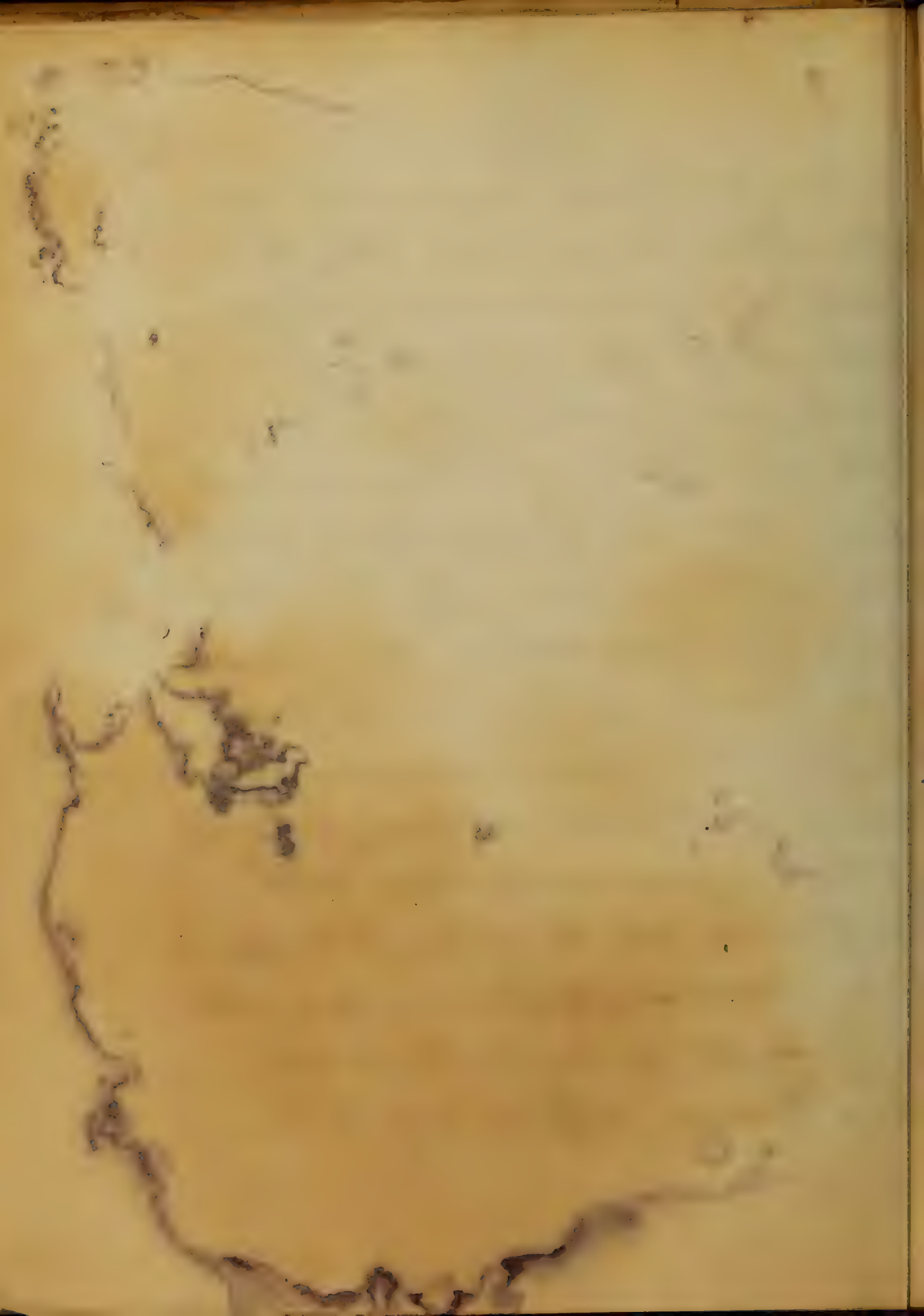


glazed eye, are the omens of speedy dissolution. It is a blessing of nature, that even in its worse form, the sufferers seldom believe they will not recover; and this mental hallucination, which should never be dissipated, sustains them, and makes what would otherwise be a most unendurable existence, comparatively comfortable.

Lavinia supposed you could not have consumption without a deposit of tubercle in the lungs, and that cavities would be produced as the result of softening, and subsequent exfoliation and expectoration of the tubercle. I explained these deposits to be of a [illegible] character and would [illegible]

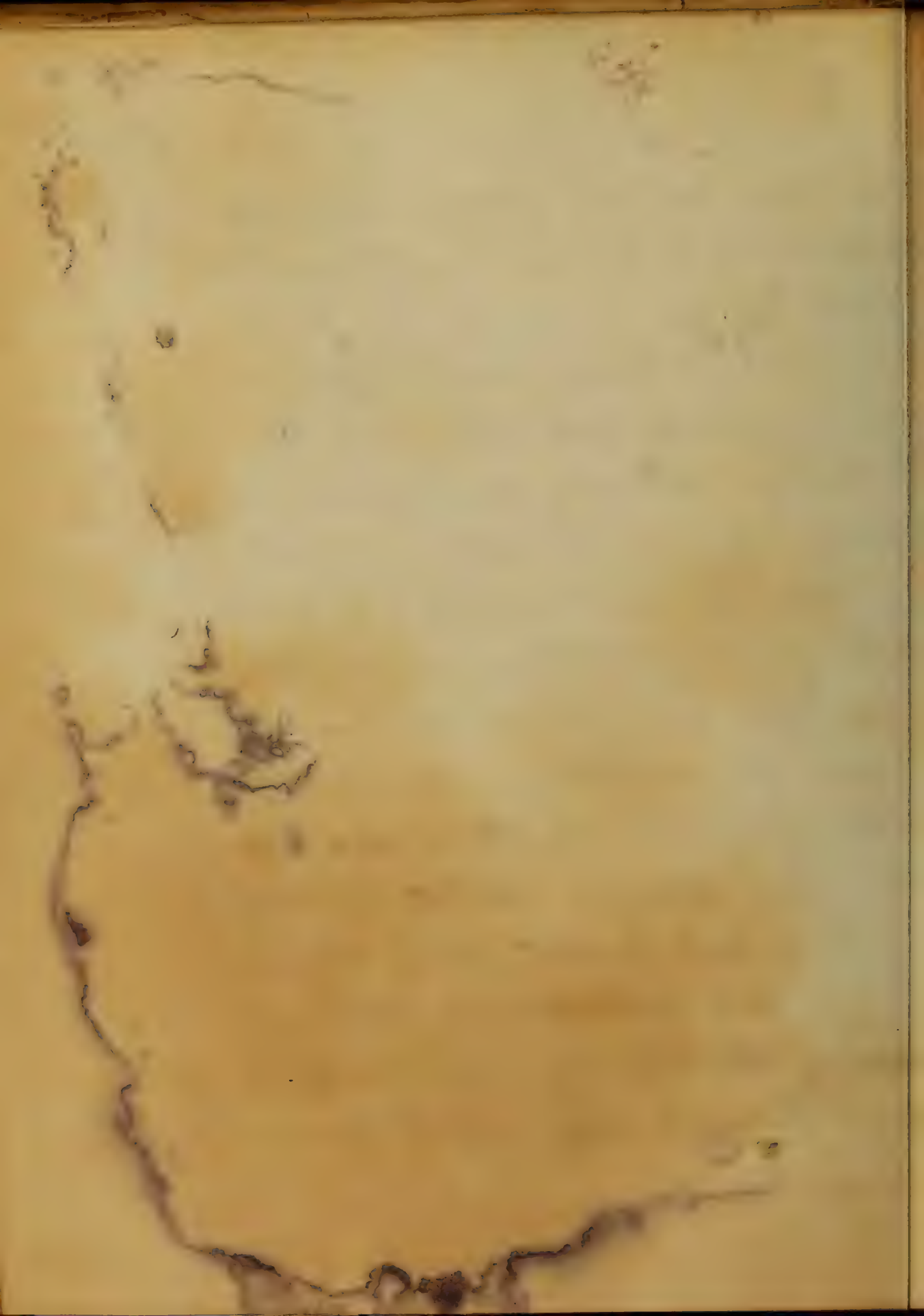


a thing as chronic pneumonia or inflamation - We now know that the deposit is not heterogeneous but homogeneous. Cases often arise, which bear for their origin not tubercle in the lungs, but inflamation sometimes results from deposition of a particle of blood or pus, in the air cells of the Bronchial tubes, which may become chronic and lead to Consumption. We now know the fact that Consumption may be caused by tubercular deposit, Catarrh, or Chronic Pneumonia. These latter are of Course not hereditary, but acquired, Accordingly [illegible] is may go on [illegible] lung become [illegible]



down, and even end fatally, without the deposition of tubercular matter within the lung.

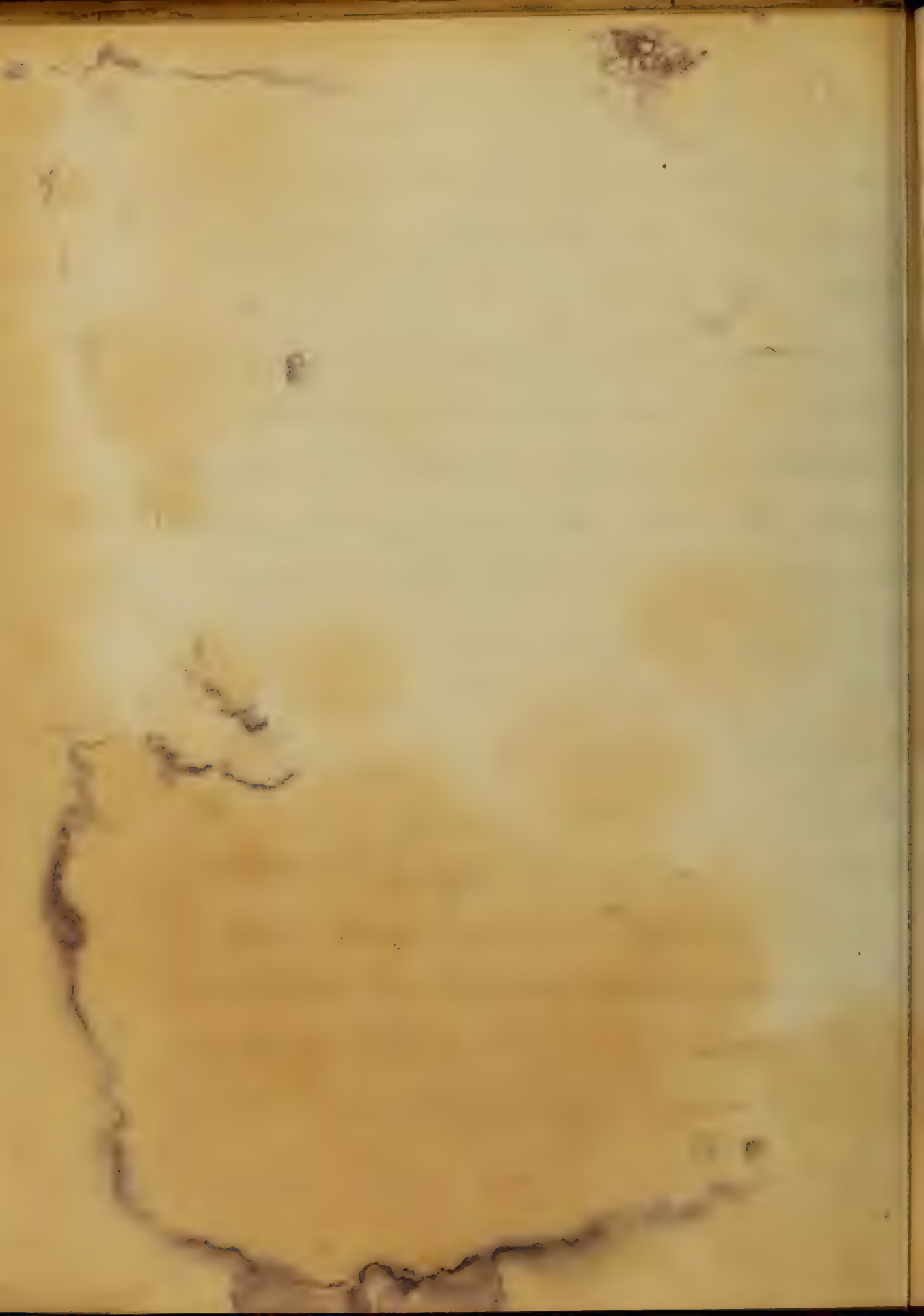
As regards tubercle, two products have been included under this head, viz: tuberculous, miliary granulations, or gray tubercle and yellow tubercle. The latter has been considered by Virchow as the only true tuberculous matter, while other able pathologists have considered the gray tubercle as entitled to that rank. The characters and relationship of these two morbid product are still sub judice, as [illegible] that they are [illegible] others that [illegible] same. Without entering into the various



arguments pro and con, it will suffice to state that they may both be regarded as the local expression of a grave constitutional disease. That the tuberculous diathesis is often inherited is doubted by none, and we know that the slightest exciting cause, as exposure to vicissitudes of weather, will often light up the latent fire in a person with tuberculous diathesis, while the same exposure will not similarly affect those who have it not. Of the essential nature of this disease we are ignorant; it remains

as the causes of a condition or fact which has been clearly demonstrated.

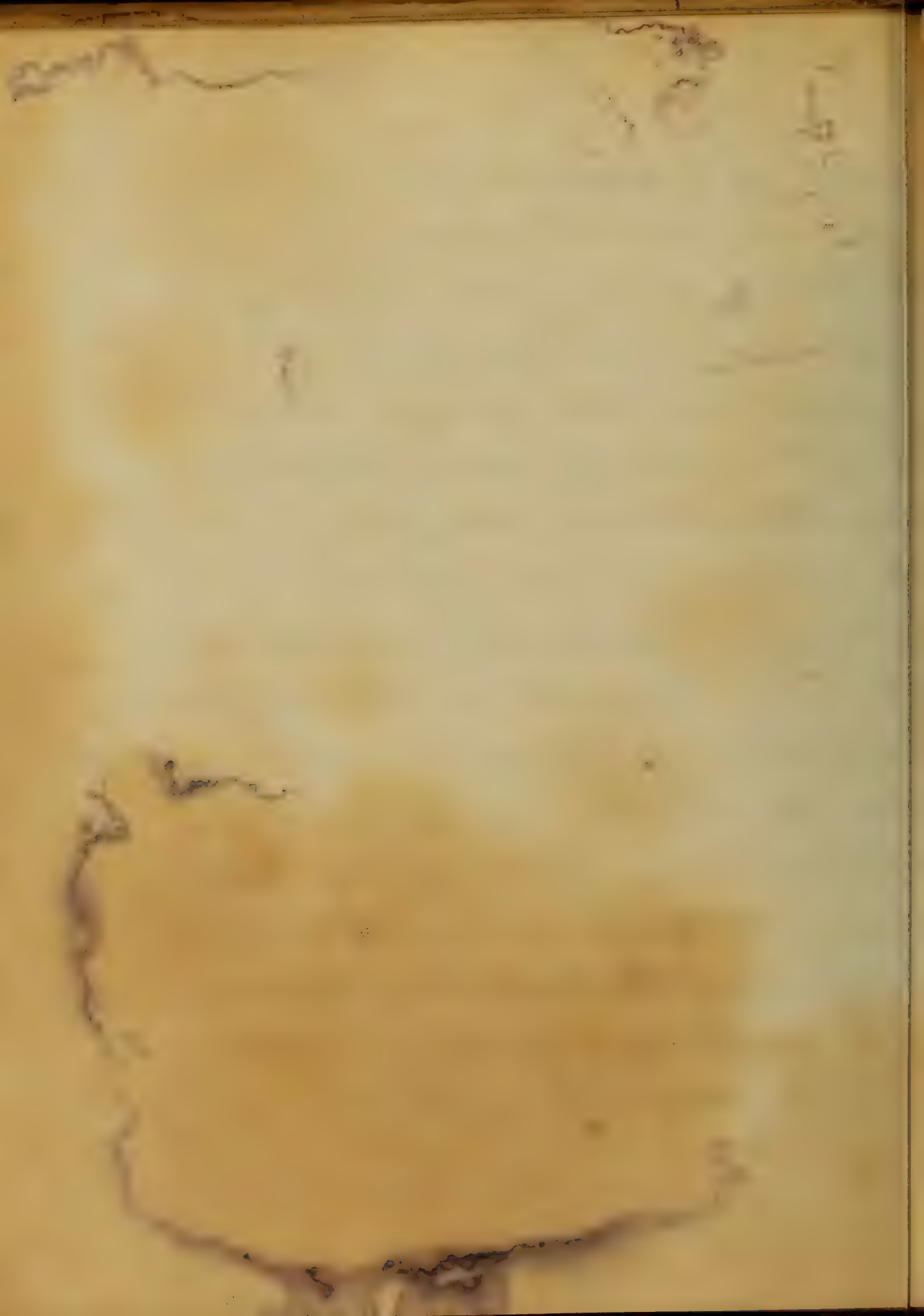
Auxillary causes, such as climate defective hygienic conditions, mental depressions, exert an influence for the development of the disease. Persons with tuberculous cachexia, may sometimes prolong life by removing from a moist climate, subject to frequent alterations of cold and warmth, to one uniformly dry and cold or uniformly warm and dry. The bracing and invigorating climate of Montana [illegible] commends [illegible]



those with weak lungs. The contagiousness of this disease has been and is still advocated, but it is regarded by the majority of the profession as non-contagious, altho' a combination of peculiar circumstances tends often to give countenance to the theory of the contagiousness of Phthisis.

An early diagnosis of pulmonary Tuberculosis is absolutely impossible without resorting to physical signs, in connection with the history and symptoms of the patient. When the tubercle is given to the disease has made [illegible] progress, the

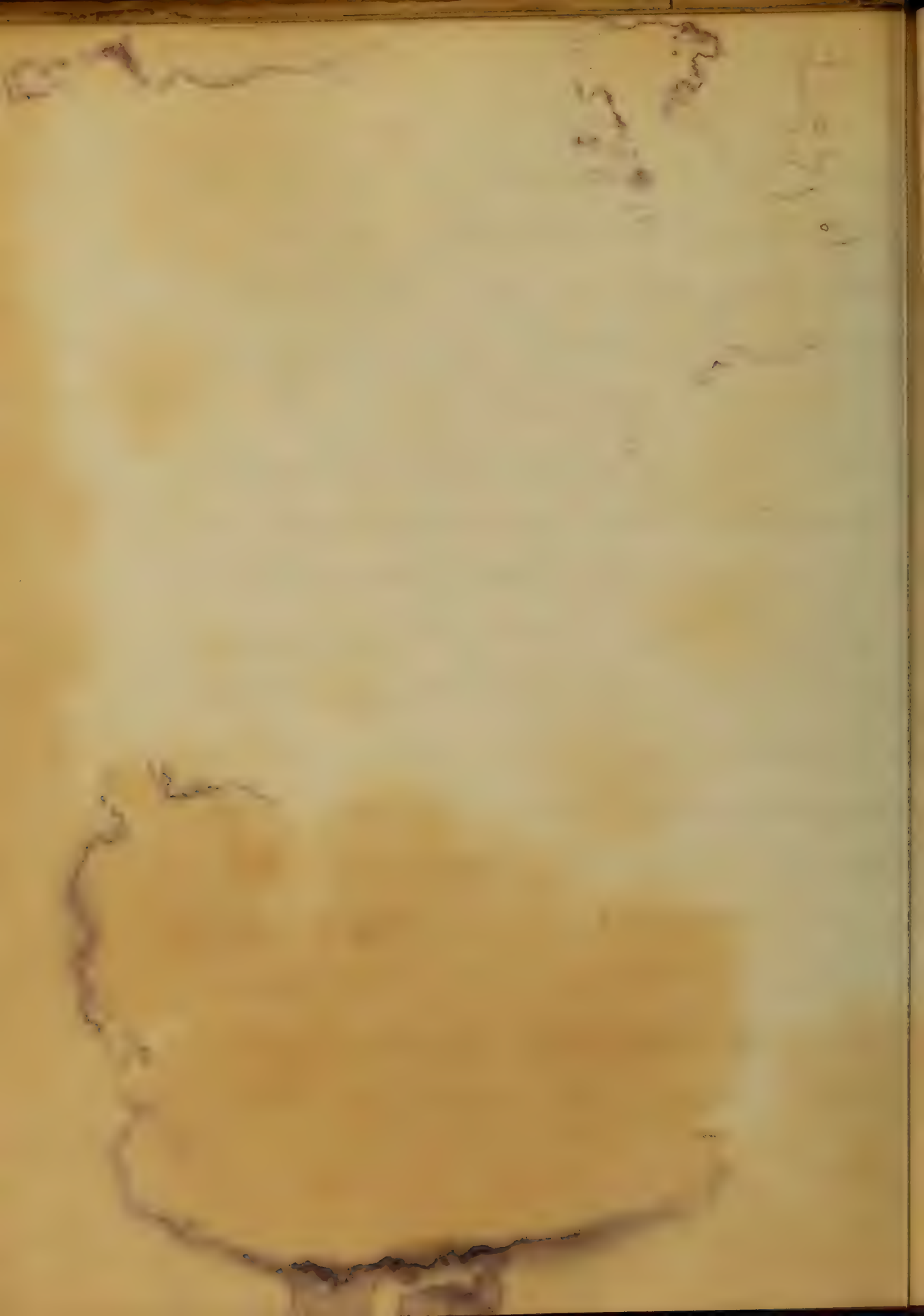
enable us to diagnose the disease with comparative ease, but when the tuberculous matter is deposited in small granulations, and the symptoms not so well marked as in the more advanced stages, the diagnosis is less easy and the physician must mainly rely upon physical Exploration. As a general rule in this stage dulness on percussion will be heard, but when the lobules become Emphysematous the resonance is vesiculo-tympanitic. (A comparison of the respiratory murmur will also be necessary and will show the character of the breath-



-vesicular respiration, at the summit of the lung. Exaggerated vocal resonance is an important diagnostic sign as is also the bronchial whisper.

These are the principal physical signs, but others will sometimes be present which will assist inferentially in the diagnosis, such as the mucous, and sub-crepitant rales, crumpling and crackling sounds, limited to the summit of lung, abnormal heart sounds and [illegible] respiration.

When the disease is [illegible] -ably advanced, and the [illegible]



-ant cough and characteristic
expectorations are recognized, the
diagnosis is no longer doubtful,
and the physician can tell
the nature of the disease with
absolute certainty-
The prognosis, in the majority
of cases, is quite unfavorable;
but clinical facts show, that the
mortality from the disease has
considerably diminished, within
the past few years, because the
management of this affection,
is more thoroughly understood
at the present day than formerly-
thanks to the progress
of Medical

ways in which the disease may pursue a favorable course, first, the whole tuberculous deposit may be absorbed, or the animal, constituents of the morbid product, may be absorbed, and the Mineral remain stationary in the form of Calculi, or gaining the bronchial tubes may be Expectorated. When Cavities become completely cicatrized, which sometimes happens, complete, or nearly complete, restitution to health may take place. Again, the onward course of the disease may be [illegible], when the patient [illegible] and it may re[illegible]

which recurrence however, can not be pathologically considered as a <u>continuance</u> of the disease but only as a fresh outbreak of tubercle with its attendant morbid consequences.

Pulmonary Tuberculosis, sometimes from a natural intrinsic tendency ends in recovery without treatment. This however can only take place when the amount of tubercle is small, and the general constitutional disturbance is slight. It is well however, not to forget, that the general [illegible] entirely and

-molic of the local affection.
The prognosis is of course more
favorable when the appetite is
good, and the digestive organs
remain unimpaired, for the ten-
-dency of this disease, is to wear
the patient out, and if food
and stimulants cannot be
taken and assimulated, the
disease must necessarily prove
rapidly fatal. Diarrhoea, which
is almost always present, as a de-
-bilitating agent, is quite unfavor-
-able, as is also a repugnance
to fatty articles of food
play an Essential part as a-
proximate prin-

nutrition of the body. Haemoptysis has caused death by filling up the Bronchial Tubes, and consequently causing suffocation. This is however a rare occurrence. The treatment of pulmonary Tuberculosis has undergone a radical change within the last twenty five or thirty years, and with the most happy and beneficial results. Our brother predecessors of the olde School could resort to blood-letting, Cathartics, Emetics, Mercurials and other depressing agencies, confining the patients within doors [illegible] means in their power, [illegible]

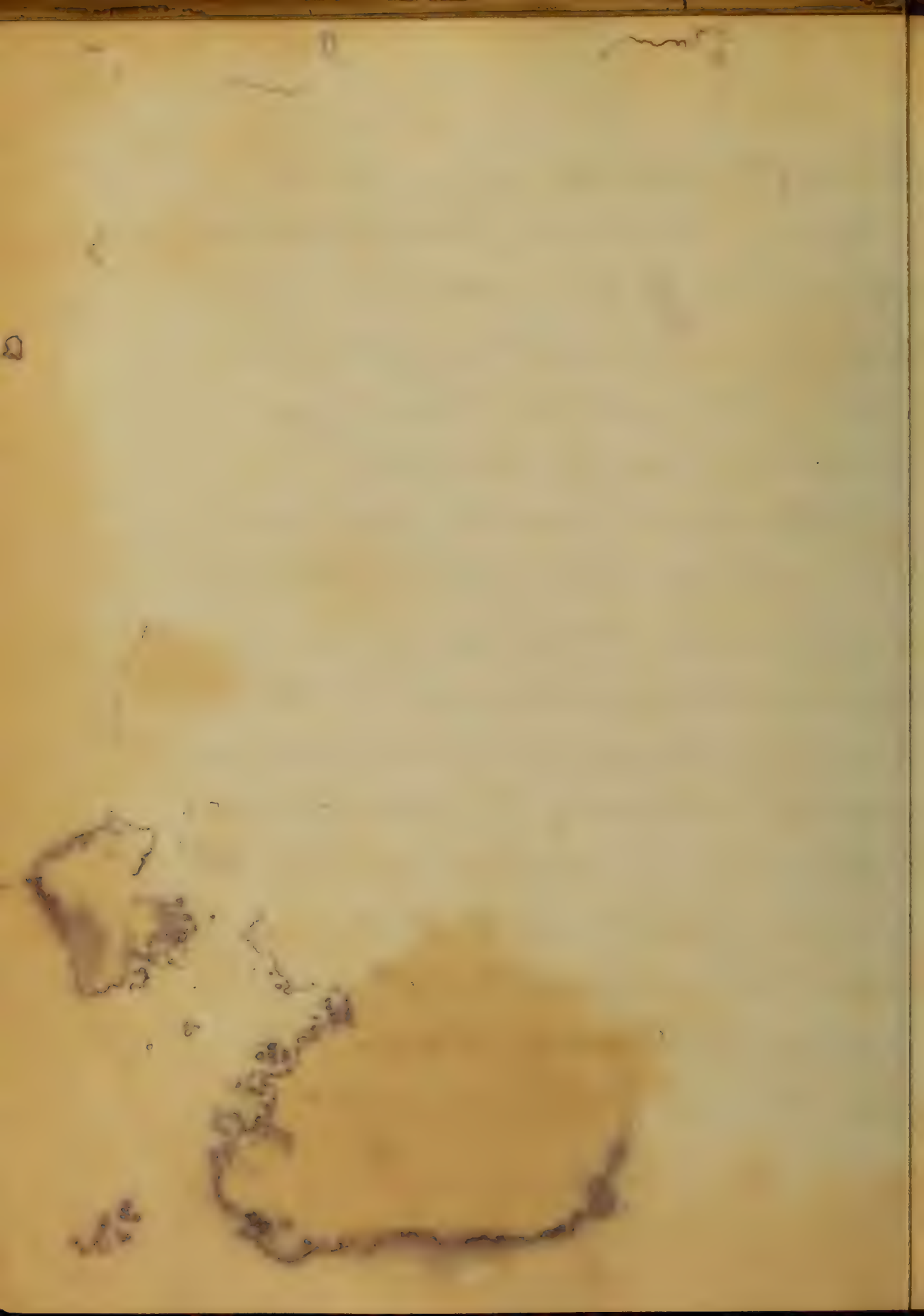
ing the patient to the grave. Clinical observations have taught us that all depressing remedies are contra-indicated, and that we must use all measures which tend to strengthen and invigorate, if we wish to arrest the onward march of this destructive Enemy. Altho' the pathology of this disease is now better understood than formerly, yet, we have so far failed to discover any specific, by which the tuberculous cachexia can be removed. We employ therapeutic remedies, which are of decided benefit, such as strengthen and invigorate the patient, avoiding all which have a tendency

to impair the appetite, disorder the digestive apparatus or lower the vital forces.

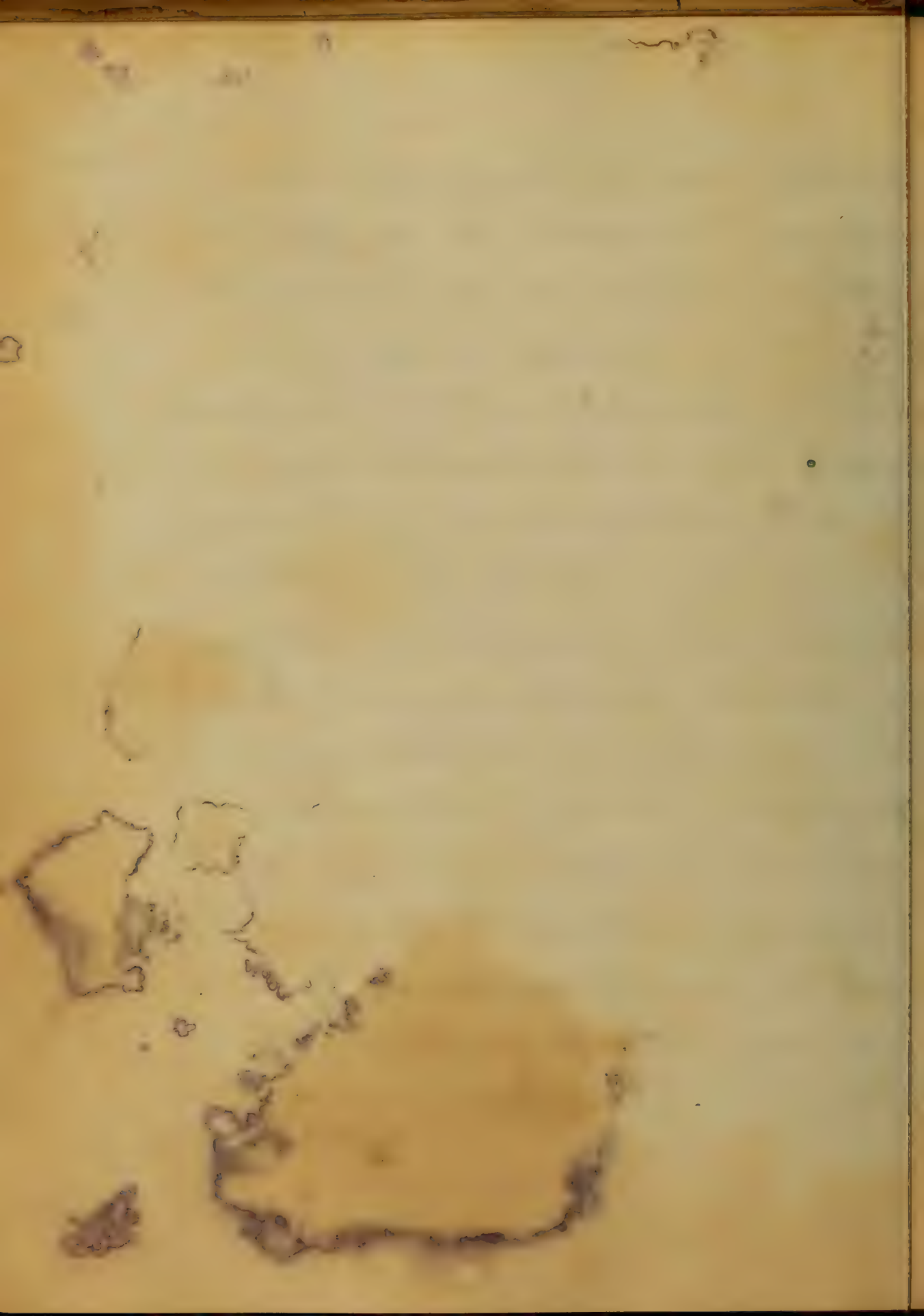
The diet of tuberculous patients should be nutritious and the appetite should be encouraged as much as possible. There are no special kinds of food, which could be, as a general rule, recommended to all patients, but those, which the patients relish best, and of a nutritious character are always to be employed. The best prescription, is no doubt, plenty of out door exercise, conjoined with occupations tending to engage the attention of the patient and [illegible] water [illegible]

Change of climate is no doubt extremely beneficial, and the locality selected is to be determined by the particular conditions, habits, and taste of the patient. Sea voyages are highly recommended.

Patients should be well protected from change of weather, but should not remain in doors except in very inclement seasons. Cold hygienic measures do not always arrest the disease, they have been sufficiently successful to encourage physicians to recommend them highly, to the patients; in a vast number of cases they render the patient

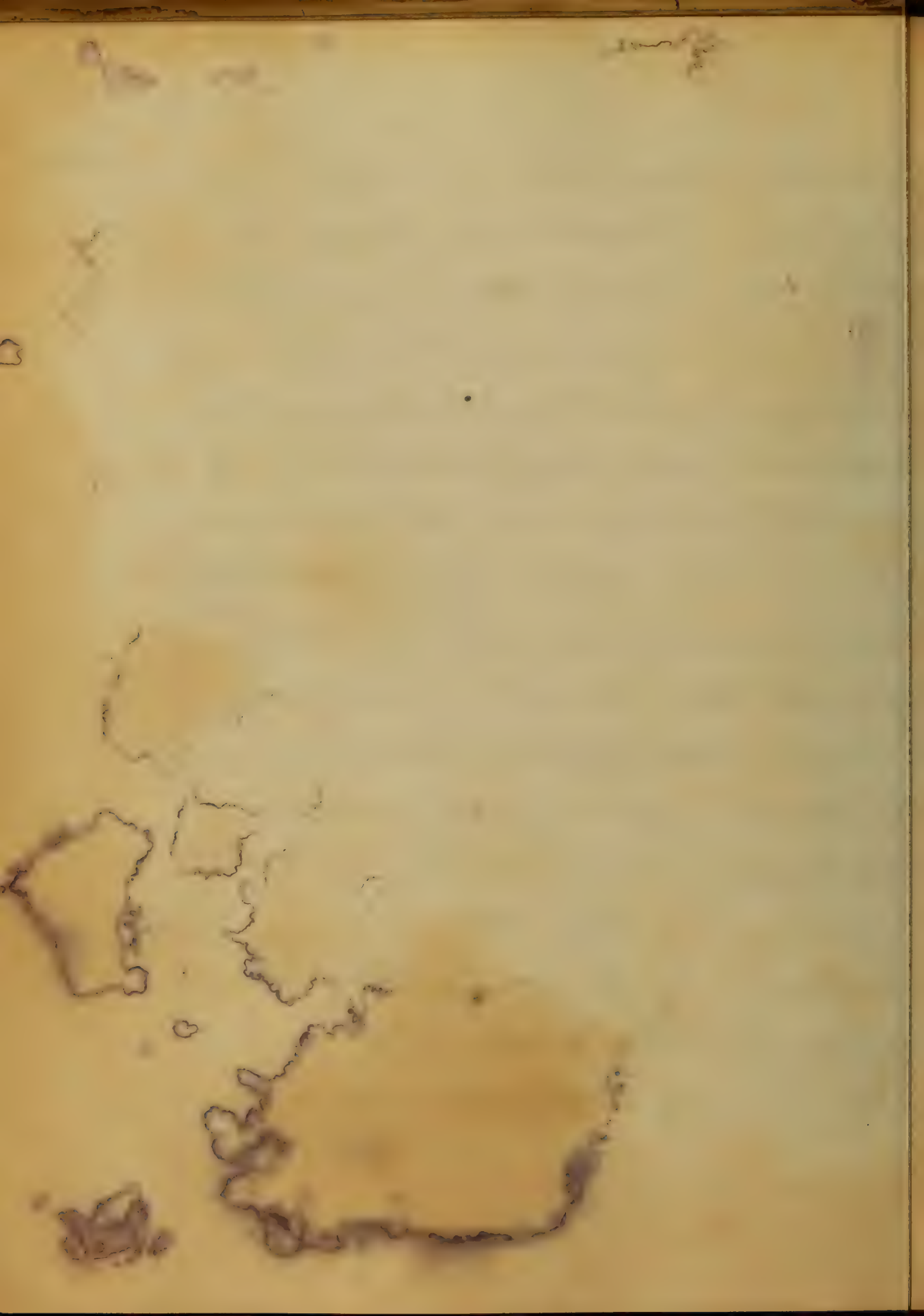


-fortable and prolongs life, which
considerations alone are sufficient
to justify this course of treatment.
As to the remedies which enter
into the management of this disease
many have been recommended
by able pathologists, which however,
alone, as before stated, have not proven to be
specific, but judiciously Employed,
are extremely beneficial, and have
been received and adopted by the
profession at large. Alcoholic
stimulants, whether regarded as
alimentary or medicinal no doubt
exerts a curative influence in parti-
-cular cases, altho' the [illegible]
Efficacy has been [illegible]



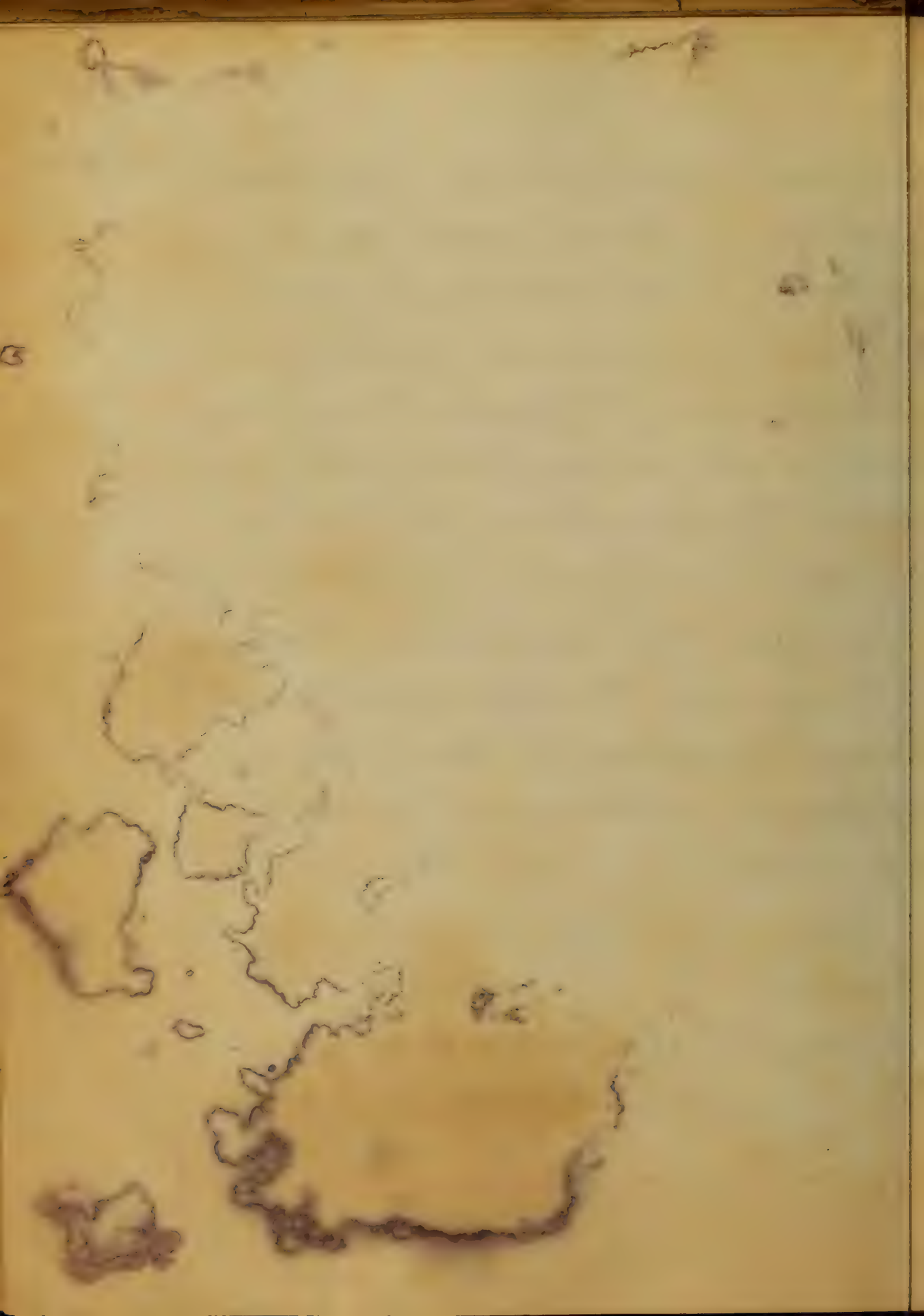
and there seems to be a difference of opinion, but clinical facts, I think, clearly demonstrate this beneficial and curative power when judiciously employed in particular cases. The indiscriminate use of alcohol is to be greatly condemned; the particular form is to be taken into consideration, because some patients are benefited by Spirits, some by wine and some by Malt liquors, but of course the remedial principle is alcohol, And the form under which it is to be employed is to be derived from the preference of the patient and results of Experimental trials.

Cod liver oil in

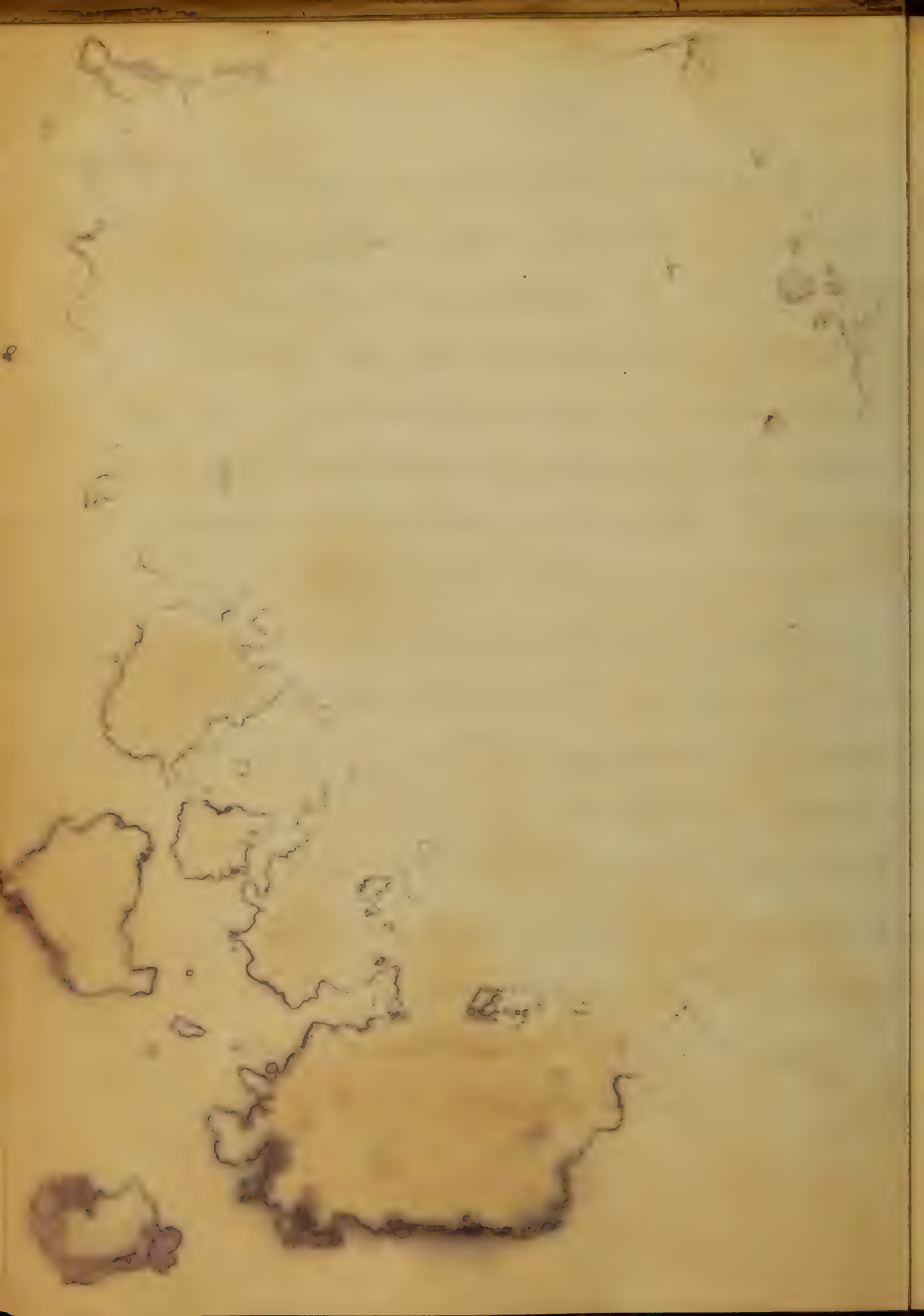


is of decided benefit, but like Alcohol is not productive of good results in all cases, but it certainly exerts a curative influence in certain individual cases. Different tonic remedies, such as gentian, bitter infusions of wild Cherry bark, citrate of iron and gentian, are the Chalybeates to be prescribed according to the peculiar circumstances of each case. Hypophosphites and chlorate of potassa have been spoken of as specifics but such is not the case, altho in certain cases both are useful as Tonics.

The cough is often relieved by hyoscyamus, Belladonna and hydrocyanic acid



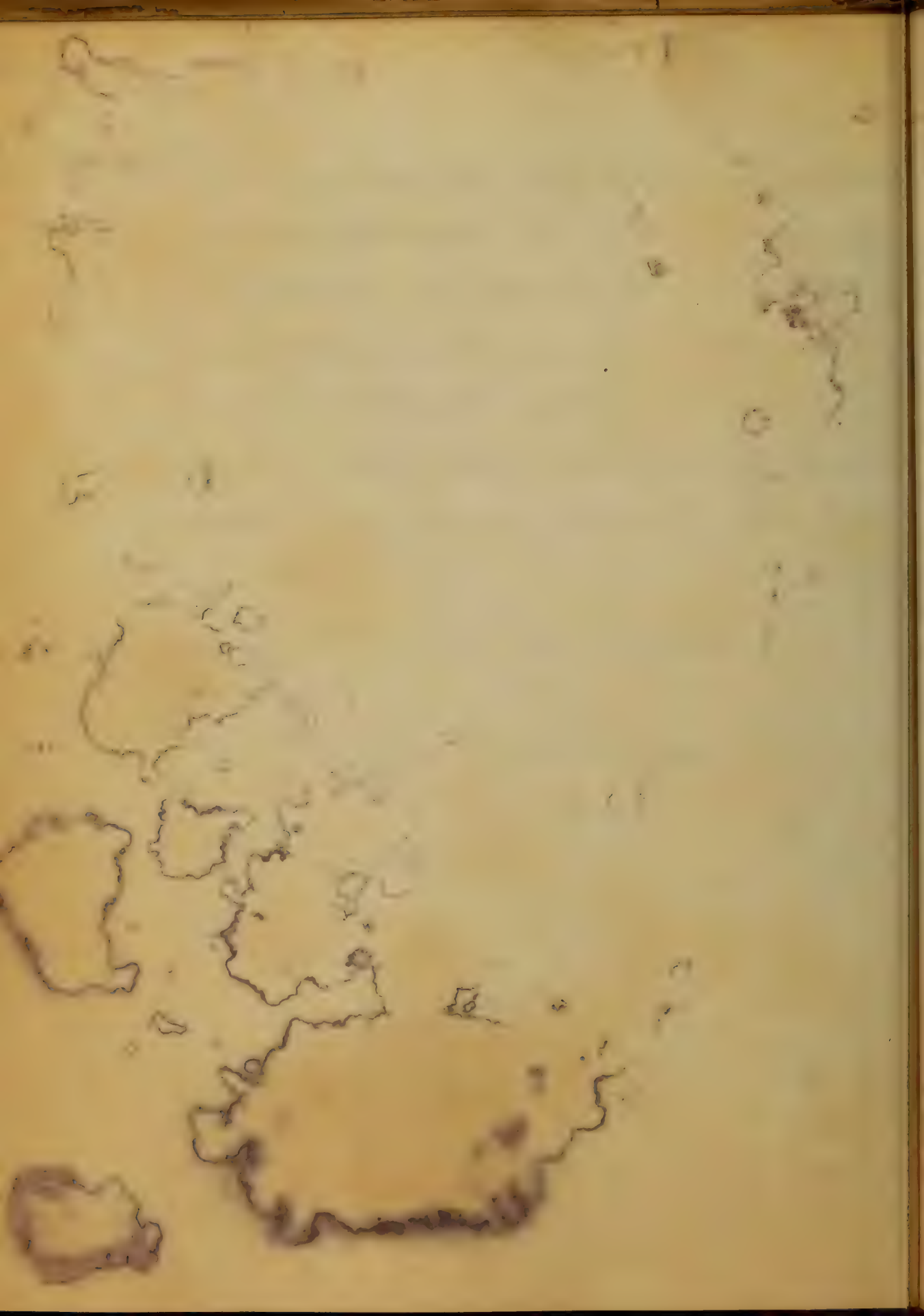
and if these fail Opium in some form is required - Soothing inhalations are often useful ~~in allaying~~ in allaying the irritation which produces the cough. Complications, such as pleurisy, is to be relieved by revulsions and soothing measures. Diarrhoea should be checked by opiates and astringents. If perineal fistulas arise in the course of the disease, they are not to be interfered with by surgical means. Ethereal preparations are highly spoken of as beneficial agents in Mitigating dyspnoea. The exhausting and debilitating night sweats are often relieved by the employment of acids, especially the dilute sulphuric and gallic or tannic acid.

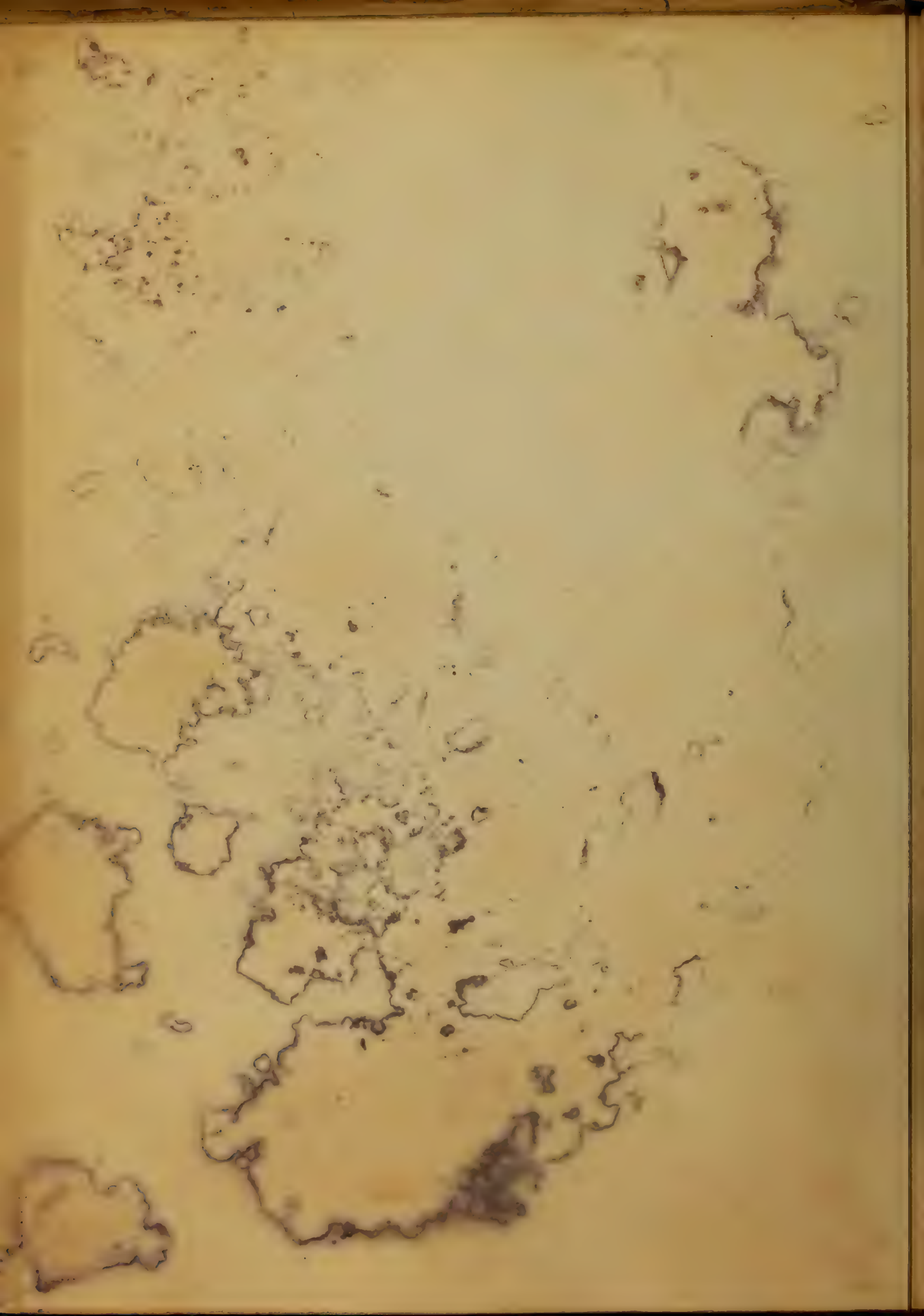


judicious use of these remedies, if we
Effect not a cure, or arrest the disease,
we will have the unalloyed consolation
of knowing we have faithfully discharged
our duties, as Medical practitioners, and
relieved the sufferings of our fellow men;
which is the greatest reward a physician
can enjoy—

Respectfully submitted.
by
Jos. S. Baldwin
of
Virginia.

1873.





An
Inaugural Dissertation
On
Chorea Sydenhamii
Submitted to the examination
of the
Board of Regents and Faculty of Physic
of the
University of Maryland
for the
Degree of Doctor of Medicine
by
James [illegible] Hall
[illegible]

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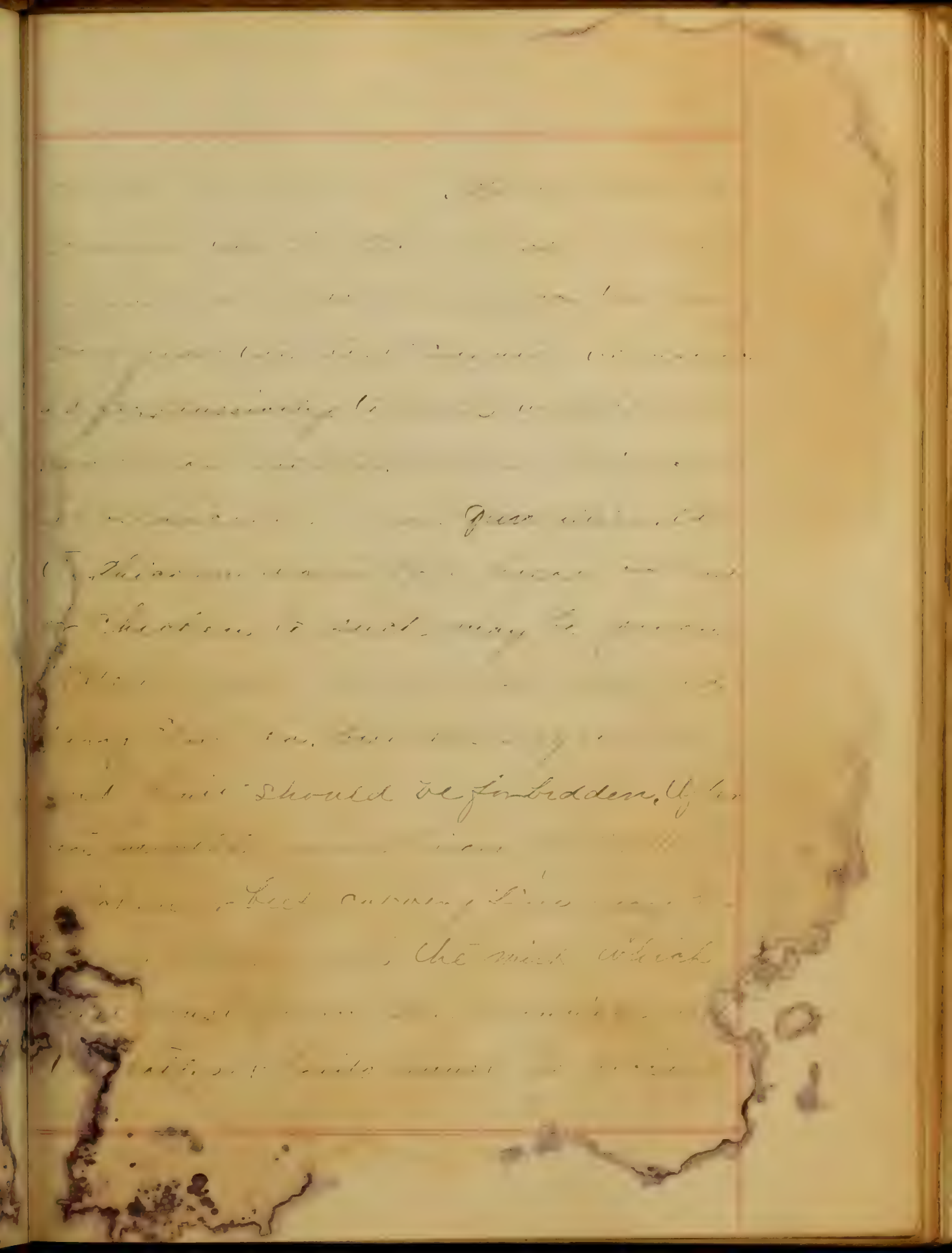

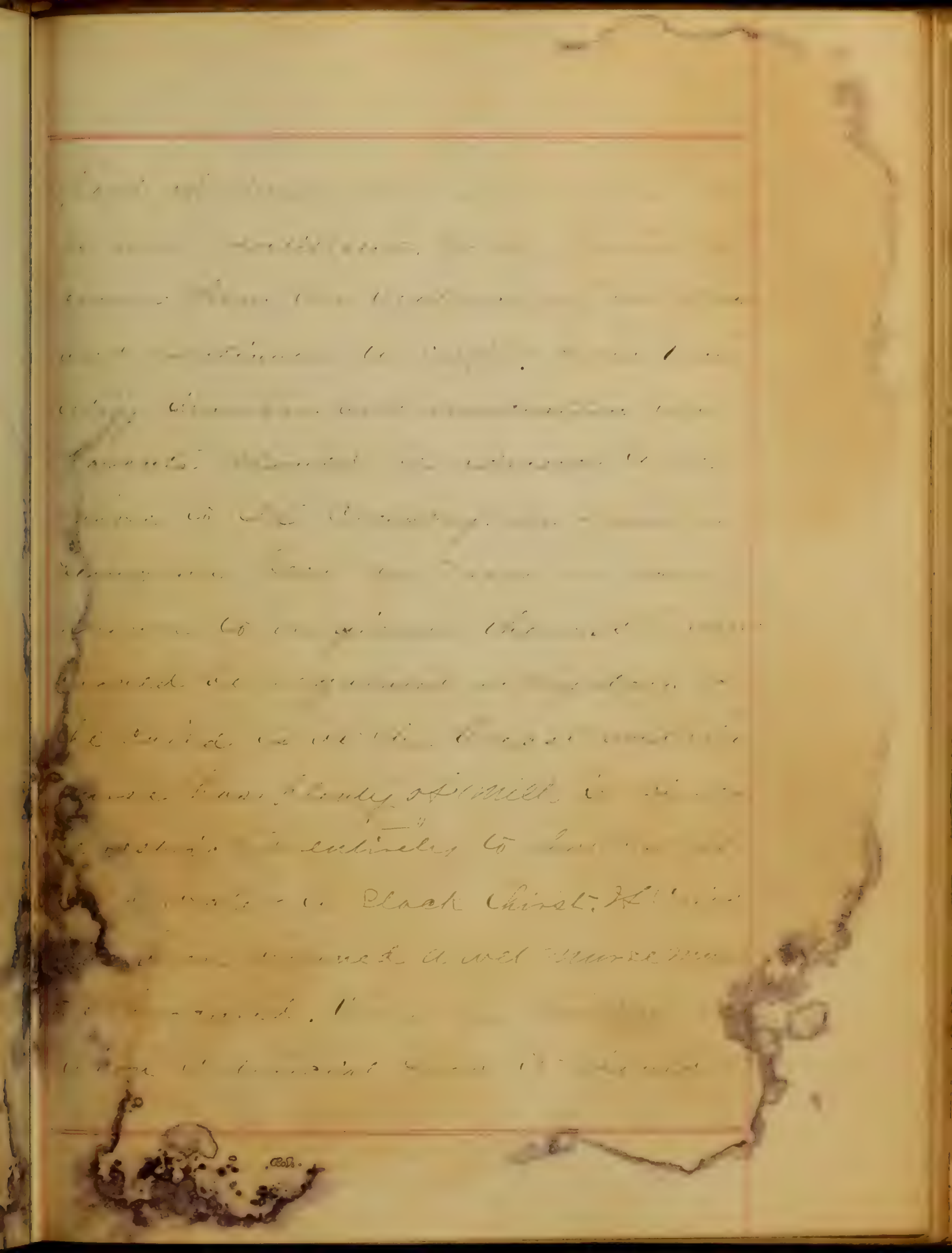

[illegible] it is not needed
[illegible] the Encephalic symptoms
[illegible] nervous and not due
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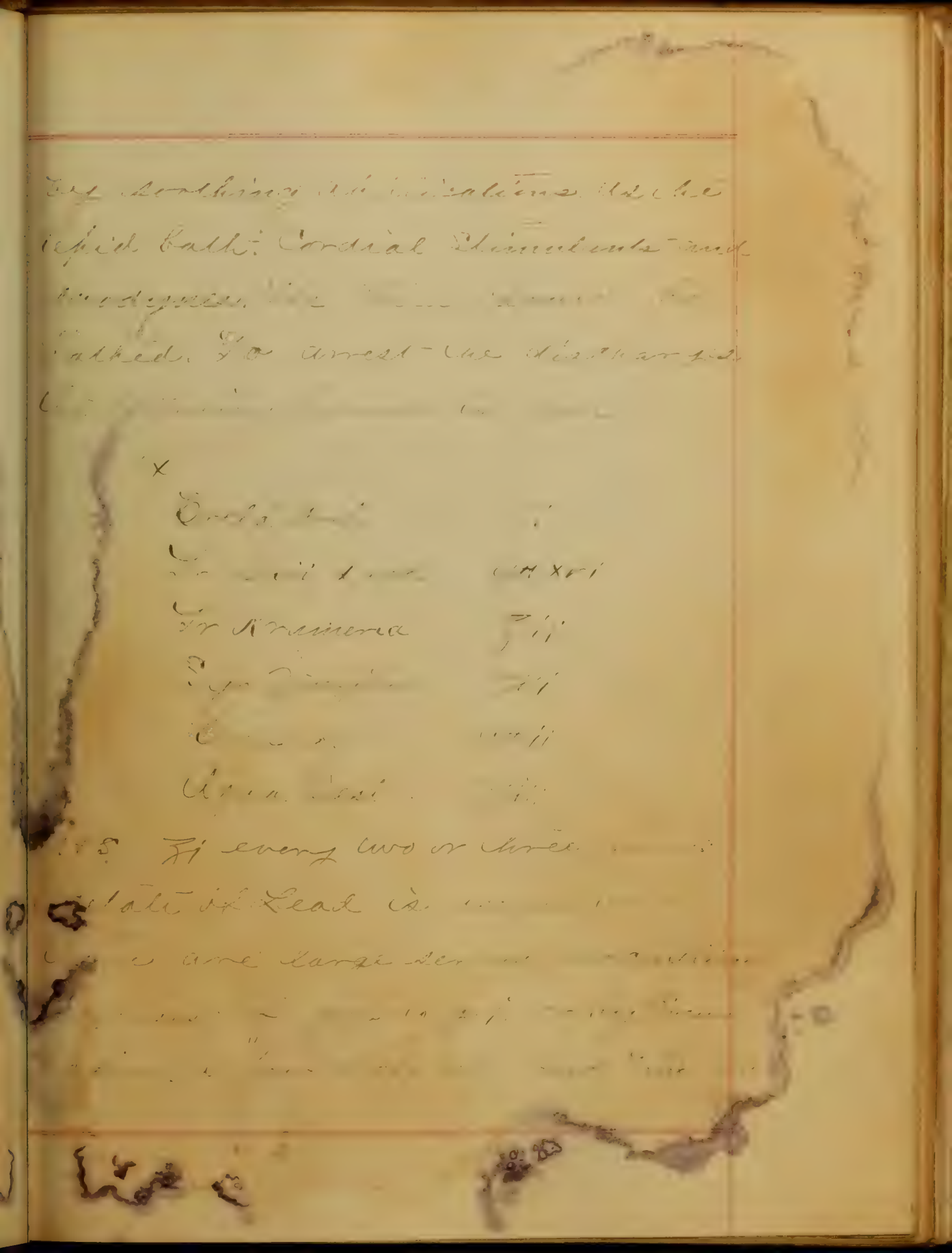
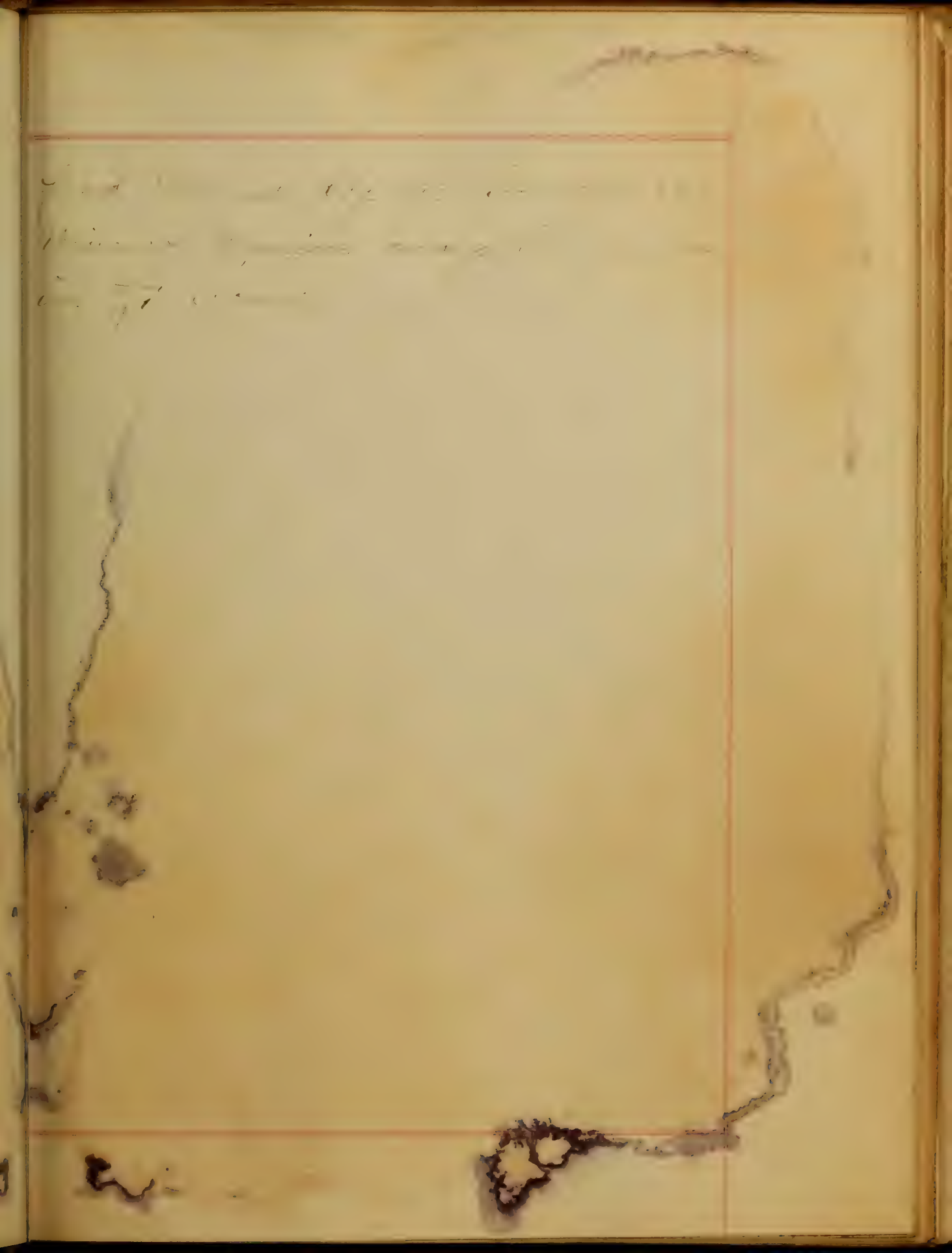




1873

Inflammation.

A Thesis.

Respectfully submitted
to the Faculty of the
School of Medicine of the
University of Maryland.

By F. A. Warner.

Inflammation is a condition in which there is an increased generation of animal heat. I propose to consider it with regard to its phenomena, its symptoms, its termination and its cause. It is disputed whether contraction precedes dilatation of the blood vessels or not. In all probability it does but does so instinctively (if I may use the term) and almost instantaneously as the eye closes at threatened injury or as the heart upon sudden fear momentarily stops before re-action. It is a recoil from danger, a faculty or an instinct possessed alike

alike by most organized beings. Dilatation immediately follows and the flow of blood, which was partially impeded by the transient contraction of the vessels, now is accelerated and an increase of it is conveyed through as well as to the inflamed part. The blood which at first had an excess of red corpuscles becomes deficient in this respect and grows thinner. The white corpuscles relatively increase and by accumulating distend the already dilated vessels until exudation takes place.

The evidences of inflammation are local and remote, locally, pain

preternatural redness, swelling preternatural heat. Pain is a symptom of inflammation, its intensity depending on the structure affected, being greater in unyielding tissue than in that which is more lax. Its character is also dependent on its seat.

Preternatural redness is an invariable accompaniment of inflammation and of course is but the exhibition of an abnormal collection of blood at the place of pain and which, as it increases gives rise to swelling that may or may not be perceptible.

The

the heat of the part is above that of the general temperature and it is due to increased vital action.

The remote symptoms depend on the extent, seat, severity and duration of the local inflammation. Thus, an abrasion on the exterior of the body might give little or no trouble, whereas if the same was on the peritoneum life would be in jeopardy; or, again, in the first instance the wound might become erysipelatous and by its effect on the system at large become serious in its nature. — The constitutional effect

effects of local inflammation assume one of three forms of fever, the sthenic, the asthenic or the irritative. Which of these shall appear depends on the previous condition of the blood and of the nervous system.

Inflammation may terminate by resolution in which case by the reabsorption of inflammatory material the tissues involved are restored to their normal state. Metastasis may occur - the disease being suddenly transferred to some other portion of the body. Pathic matter may be thrown out and repair

repair take place by its organization.

However absurd it may seem I am inclined to believe that the cause of inflammation is the imperfect supply of life which in other words is nervous influence, hence for its channel the sympathetic nerve. The presence of foreign matter on this nerve ex= ercises a paralyzing effect which may either suspend or suppress its power of regulating the calibre of arteries. To make this clearer, suppose for instance a piece of skin is removed from any part of the body, beneath

beneath will be found tissue traversed in all directions by blood vessels, lymphatics and nerves. Assume that the arteries bring oxygen to the part, the veins re- move débris, the lymphatics contain carbonaceous matter and lastly the nerves regulate these actions. So long as each performs its office regularly, health exists. Now suppose a foreign body is placed on the spot and allowed to remain, the function of the vaso motor nerves is at once interrupted. The Cerebro spinal nerves retaining their

their power of transmitting impressions, indicate by pain the reception of something incompatible with the maintenance of the former condition of health; they make an appeal as it were to the will, which if heeded and the irritant is removed, repair commences. If, however, the irritant is allowed to remain the arteries unconstricted or partially so hold an abnormal quantity of oxygenized blood veins, arteries and lymphatics enlarge pari passu. the surrounding tissue is pressed into closer contact

and

and thus affords more
carbon in a given space
for the excess of oxygen
to unite with. Chemical
union consequently takes
place much more actively
than usual. Hence pre=
= ternatural heat. This condition
increases until the swelling
and pain are to some
extent relieved by exudation.
Recovery, however, may not
even here take place. If
the intensity of the previous
inflammation has been so
great as to destroy all nervous
communication, gangrene
follows. — As urea is a

a product of inflammation it probably serve to account for the constitutional symptoms of local inflammation in this, that when the kidneys are diseased. or even when in their healthy condition. this matter cannot be eliminated as rapidly as it is formed. it becomes a source of irritation in itself to the system at large and gives rise to symptomatic or in= =flammatory fever.

This view seems to me to be strengthened by Dalton's experiments on the sympathetic nerve

nerve. Speaking of its function he says that the division of it near the eyeball is followed by destructive inflammation of that organ but that when it is divided at a distant part in the neck no real inflammation follows but only congestion and increased sensibility. May this not be owing to the fact of the section in the first instance being so near the termination of the nerve that the distal end has not vitality enough left to regulate the calibre of those particular arteries

arteries to which it is distributed consequently they dilate by virtue of their elasticity and all the phenomena of inflammation follow as if it had been instead of the experimenter's knife, a grain of sand, a bullet or any other foreign body that had either by pressure or solution of continuity stopped the conduction of nervous influence. In the other case the terminal end being longer it not only retains more vitality but in all probability receives additional collaterally from

from the proximal side of the section and thus performs its function, but of course imperfectly.

Inflammation may be said to be disease per se. the different forms of disease being but modifications of inflammation and no doubt the same irritant which on the nasal mucous membrane would give rise to coryza would if it attached the nervous centers produce convulsions. Intermittent fever is probably as much due to the presence of a foreign body as

as an irritant - whether
it be in the form of spores
of cryptogamous plants
or inappreciable particles
of dust - as inflammation
is to the presence lodgement
of a ball in the flesh

G. A. Legrand
de
Alexis
Flor
1873

An Inaugural Dissertation

On

Typhus Fever—

Submitted to the Examination

Of the

Provost, Regents and Faculty

Of the

University of Maryland

By

Stephen Beard

Of

Maryland

Typhus Fever

Typhus fever derives its name from the Greek (τῦφος) signifying Stupor, which indicates the general character of the affection to which it has been applied. This form of fever resembles strikingly Typhoid fever in some respects and although they are believed to be distinct and seperate forms of fever by most pathologists yet some contend for their identity even to the present day. Dr. Geo. B. Wood (Phila.) has styled this fever Typhus Gravior in contra-distinction to Typhus Mitior or Typhoid fever: he regards them as distinct forms of fever having striking resemblances.

Anat Charact: The anatomical ab-
-dominal lesions which are so char-
-acteristic of typhoid fever are want-
-ing in this fever. The Solitary and
Peyerian glands which are involv-
-ed in typhoid are slightly if at
all affected by this disease. There
are no constant and peculiar a-
-natomical characteristics which
belong to this form of fever. The le-
-sions which are sometimes found
are due either to pre-existing
disease, to complications or occur
as an accidental connection. The
Spleen is frequently enlarged and
softened; heart is sometimes found
soft and flabby. The blood is said

to be unnaturally dark and fluid. The kidneys congested and Prof. Clark has noticed a high vascular state of the bronchial surfaces.

Causation. The contagiousness of this disease is admitted by many able pathologists. Dr. Austin Flint mentions an instance which occurred in the Buffalo Hospital of the Sisters of Charity. Of the twelve sisters engaged in this hospital five were assigned to the wards which contained the typhus fever patients and all of them contracted the disease and the remaining seven who were not brought

in contact with the fever es-
caped. Among the other causes of
typhus fever the most prominent
are; vitiated air, deficient ven-
tilation & over-crowding of persons in
apartments. Authors vary in opin
ion as regards the period of in
cubation. Dr. Murchison states it
is on an average about nine
days. Dr. Wood regards it from one
to two weeks. Most pathologists
states, that it is necessary to come
in contact with the typhus pa-
tient in order the disease may
be communicated and think the
disease cannot be acquired
from the infectious miasm

which emanates from a ty-
phus fever patient.
Symptoms. The person is affect-
ed preliminarily with morbid
sensations but not to the same ex-
tent as in typhoid fever. There
are at times feelings of weariness
and malaise with cephalalgia
but in a majority of cases the
individual is taken with a chill
and feelings of great debility which
compel him to take to the bed.
The face is of a dark, dusky or
dingy hue due to capillary con-
gestion and is said to be so mark-
ed in some cases that the at-
tending nurses can discriminate

it by its physiognomy. There is
sordes collected on the gums and
tongue and delerium and coma
are present. From the fifth to the
eight day an eruption makes its
appearance: it is of a dark purple
or dingy color, disappearing on pres-
sure in the early stage and can
be distinguished by the regular dark
dusky color of the spots. This eruption
is found over all parts of the body
and is not very unlike that of Ru-
-beola. It is at first slightly raised
but afterwards as generally seen is
not elevated. After the early stage
the eruption does not generally dis-
-appear on pressure. These spots

do not come and go like the rose-
-papules of typhoid but remain dur-
-ing the greater part or entire course
of the disease. Delerium and Stupor
are present with contraction of pu-
-pils: among the other symptoms refer-
able to the nervous system, Subsul-
-tus tendinum, & Carphologia. Coma and
Convulsions in typhus are generally
due to uraemic poisoning. Diarrhoea
tympanites and iliac tenderness
which are highly characteristic of
typhoid are generally wanting in
this disease. Diarrhoea if present
at all is slight: cough due to bron-
-chitis of more or less extent is some-
-times present; and hypostatic pneu-

monia sometimes present. Some authors recognize a peculiar, offensive odor emanating from persons affected with typhus which they regard as a distinguishing characteristic, but Dr. Flint states he has not been able to appreciate the diagnostic value of this odor. The frequency of the pulse in typhus is greater than it is in typhoid being 120 to 130; and in extreme cases as high as 150 beats per minute. The temperature of the body as shown by the thermometer is usually from 100° to 106°: and has been known in some rare and extreme cases to be as high as 108°. The respira-

-tion is frequent. The most frequent complication of typhus fever is pneumonia due to mechanical congestion of blood in the posterior portion of the lungs. This complication with hypostatic pneumonia may be recognized by a bloody rusty colored and viscid expectoration; the absence of respiratory murmur and the existence of crepitant or subcrepitant rale, also by dulness on percussion. In summer this fever is more apt to be complicated with diseases which belong more properly to this season, such as diarrhoea dysentery &c. The average duration of this disease is from twelve to four-

-teen days. The modes of death by this disease is by exhaustion or by an overwhelming of the system by the poison.

Diagnosis. In speaking of the diagnosis, I will first give the points of differential diagnosis between typhus and typhoid fevers. 1st The forming stage of typhoid is of much longer duration than that of typhus. 2dly The absence of Epistaxis and bronchitis in typhus which often occur in typhoid. 3dly The absence of abdominal symptoms in typhus which are so characteristic of typhoid, such as tympanites. iliac tenderness and gurgling. 4thly The erup-

tion which in typhus is of a dark purple or mulberry hue and circular which remains and does not appear in successive crops but in typhoid the eruption is lenticular or rose-colored spots which appear principally upon abdomen and which come and go in successive crops during the attack of the fever. and does not disappears upon pressure; which in typhus after two or three days does not disappear upon pressure.

3d The eruption in typhus is abundant and extends over the whole body whereas in typhoid it is sparse and found upon the

anterior wall of the abdomen. Among the early symptoms which serve as a distinctive characteristics are delerium and coma in typhus: and as later differential diagnostic points are the setting in of peritonitis and hemorrhage of the bowels in typhoid. Being exposed to contagiousness of typhus fever will doubtless aid in establishing the diagnosis between these two fevers. Finally the diseases may be distinguished after death by the anatomical lesions which belong to typhoid fever and the absence of such anatomical lesions after death from typhus.

Prognosis. In moderate cases uncomplicated the patient usually recovers. Dr. Murchison states that the number of deaths from typhus fever in the British hospitals are about five per-cent-

The fever is less fatal in early life than in old age: the rate of deaths after fifty years being about one-half. Dr. Wood believes some epidemics of this fever to be more fatal than others. and in this as in other epidemics the first cases are generally more fatal than those of the latter part of the epidemic. Of course the more grave the complications the worse the

Prognosis.

Treatment of Typhus Fever.

The general principles in the treatment of typhus fever is so closely allied to that of typhoid fever that some authors consider them both under the same head and show the distinctive characteristics which belong respectively to each in the course of the treatise. In typhus fever you may often find it expedient to give a saline purgative such as the Magnesiae Citras, but in vast majority of cases it will not be proper to use depletion to much extent as you will find Stimulants in many cases in the early stages of the highest importance. The propriety of venesection in the early stage

of this disease has been a subject of much discussion, but it is now believed to be injurious in nearly all cases whether it is used generally or locally. The high fever and restlessness may be often benefited by the use of Dovers Powders, both on account of its quieting and diaphoretic properties, but in cases of coma it probably better be withheld and mild refrigerating such as the Neutral Mixture, Liq. Camm. Acet. or Sweet Spts. Nitre. Prof. Dalli introduced the Sulphites as exerting a curative influence in the cases of zymotic diseases, upon the theory that they oppose the fermentation which is supposed to go on in the blood.

The cerebral disturbance is so great in some cases as to require alleviation. Cephalalgia may be relieved by cold applications to the head as ice-water or water & spirits or Cologne water. Vigilance can be frequently arrested by an opiate. Delerium may not at times demand treatment but if so can be relieved by Opium or some Anodyne. Dr. Evans has recommended Antimony & Opium in combination to relieve delerium. Dr. Mowry (Phila) reports a case in which he obtained good results from the administration of Tr. Digitalis in ℥ss doses hourly until he had given about two ounces in thirty-hrs. The symptoms of uræmic disturbance

may be treated with hot vapour baths producing diaphoresis and thereby diminish amount of urea. The bladder should be watched as there is sometimes retention of urine unconscious to the patient. The mineral acids are useful in this fever. The hypostatic pneumonia should not be met with depleting measures but treat- should be guided by the condition of the patient. Stimulants are essential + wines may be used. if under the use of them the tongue becomes dry + they do harm if moist they do good. if they raise the pulse they do harm if they lower it they do good. if they produce restlessness

they do harm. if quietude they do
good. Food nutritious and easily di-
gested must be given & you must as
far as possible preserve the strength
of the patient & use Stimulants if the
cutaneous is fetid you may apply
cloths dipped in Solution of Per-
manganate Potash & lay on the
parts.

Prophylaxis Ventilation highly im-
portant and other members of the
family should be kept from the
typhus patient as far as practi-
cable.

S. J Beard

1773

Oath of P

[illegible]

[illegible]

[illegible]

of the internal pter

is pasted to the

nal, oblique and trans

ion is fixed to the crural

of the

When the

muscle gives to the pleurae, me

Transversalis, is one of the general lining membranes

hernia umbi,

peritonæum

navel

fascia

tunica vaginalis

testis

cavity

[illegible]

[illegible]

[illegible]

pond, as more large superficial and
ot painfully, it

the symphysis pubis. Femoral hernia passes
nely inwards and forwards under
Poupart, emerging at the crural ring, which is
and the femoral vein. When the hernia
ich the sac has passed is examined
ciently, it will be found that the sac
ding a little way into the sheath of
reveals terms in

[illegible]

[illegible] ninety

[illegible] and 1 hundred females, [illegible]

[illegible], this does not accur [illegible]

and the principle of generation of hernia,

incarceration &c, with regard to the

[illegible]

[illegible] only it occurred in 7,500 males & 500 females

[illegible] inguinal hernia, & comprehended

[illegible] females,

[illegible] hernia, 848 occurred in females and

198 in males thus shewing, that this disease

[illegible]

[illegible]

[illegible]

[illegible] difficulty occurs [illegible]

[illegible] palliation is [illegible]

[illegible] must be examined

[illegible] than

[illegible] of the scrotum, which may be mistaken for

[illegible], scrutiny of their gen-

[illegible] ement and progress will form the best

[illegible] distinction from a differential diagnosis. Fem-

[illegible] al hernia forms the same characteristics

[illegible] inguinal, and it is less liable to be mis-

[illegible] other diseases than inguinal because tumo-

[illegible] rs in [illegible] from other causes are much less

[illegible] frequent than those of the scrotum, Pains placed

[illegible] mistaken for it but this is preceded by pain in the

[illegible] strangulation, the [illegible]

[illegible] the ileum, the [illegible]

[illegible] vala, the tubae [illegible]

[illegible] [illegible] [illegible] the

[illegible] abdomen, tenuea, (tube) mesen-

teric, and the body is opened with [illegible]

[illegible] in, the genital in Mucaina [illegible]

[illegible] [illegible] the mesenteric vessels through paper

[illegible] and the pulse became weak and thread,

[illegible] patient sometimes at this stage experienced

[illegible]

he gently presses it

side to side and end

the inguinal

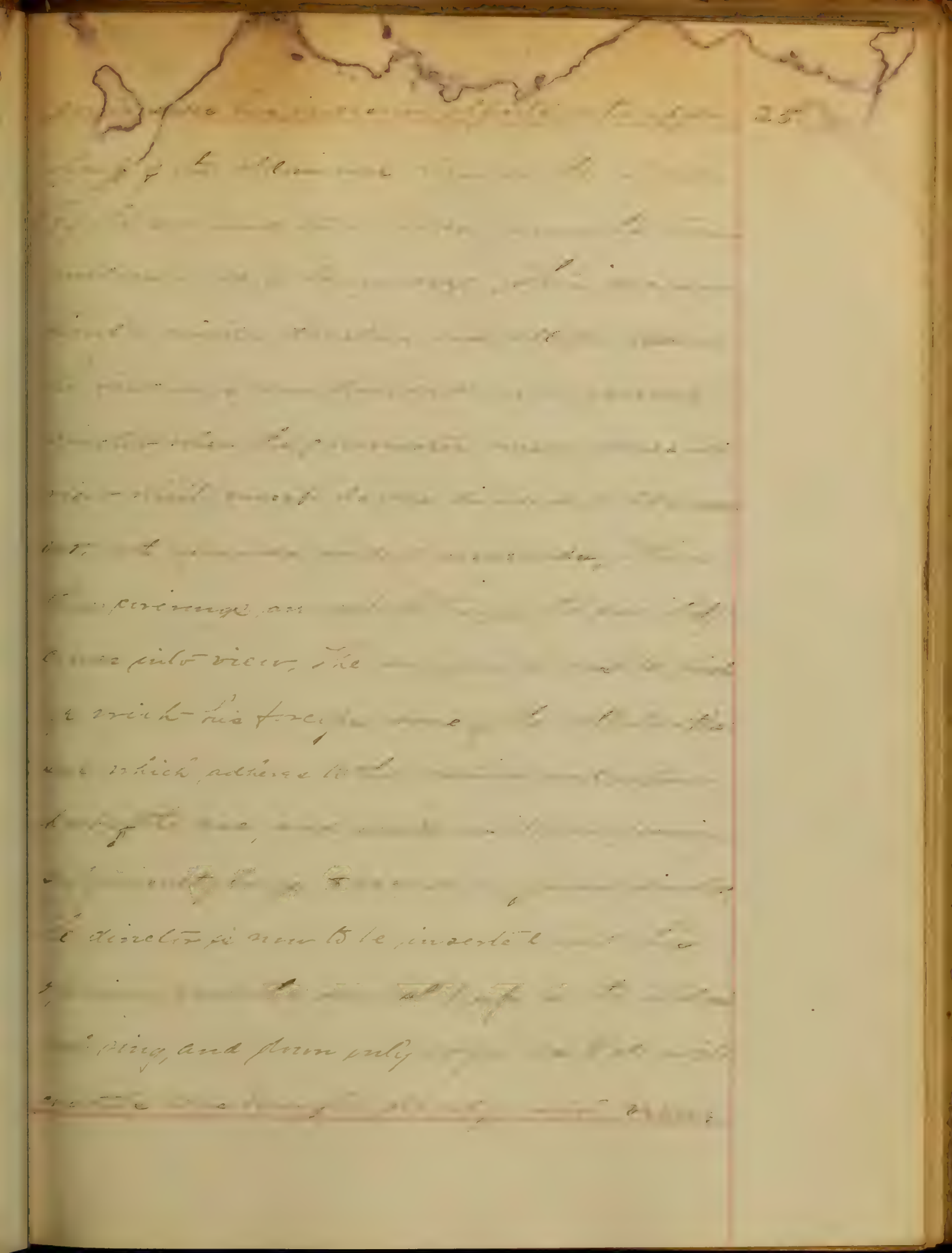
the femoral ring. This is to be performed

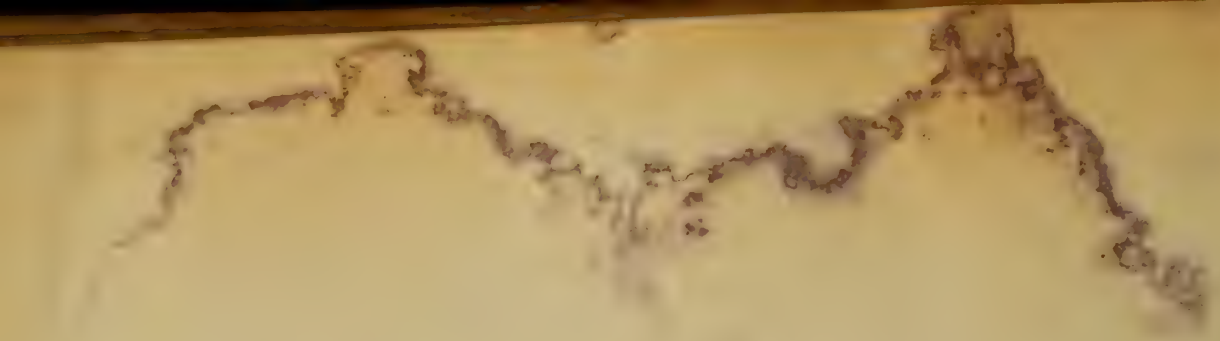
the same as

the inguinal

and putting both the thumbs on the surface of

the tumour, &c. is to press gently & well, commencing





1873

An

Inaugural Dissertation

On

Enteric Colitis

Submitted to the examination

of the

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By

D. H. Bullock

Salem, N.C.

Enteric Colitis

Enteric Colitis or inflammatory diarrhoea is an inflammation of the large and small intestines, principally of the lower part of the ileum and upper part of the colon, though it may extend the whole length of both large and small intestines.

Causations. The most fruitful causes are unwholesome food, bad air, Excesses in eating either too rich food or that of a farinaceous character, atmospheric influences especially the heat of summer predisposes to it; Hereditary predisposition is another cause, and nothing is regarded by some writers as causing it.

but this Prof. Howard denies
and explains very plausibly
by the change of diet and im-
proper alimentation at this
period, and excessive commanding
effects of first dentition. The heat
of summer is said by Dr. Smith
not to be the only cause, but its
frequency during the summer
months is owing in a great measure
to the fermentation of the various
fermentescible vegetable and
animal matters, the effects of which
upon infants. Sometimes a great
mortality of city infants happens
here it before the end of the second
Summer, meaning children

in the Spring or Summer it
may not be fatal to them
especially if they live in cities
or unhealthy localities.
Symptoms. In the beginning
in very many cases they appear
are not different from those of
simple diarrhoea. The child
passes less frequently and at longer
intervals, becomes fretful and
peevish refusing its playthings
to seek the arms of its mother
or nurse.
Vomiting may be first but
is soon followed by diarrhoea
when not they were there are
vomiting may be only for a

in a day but in more severe cases they may amount to 10 or 20. The dejections present different appearances as they come from different parts of the alimentary canal. Sometimes they contain undigested food or casein, the latter giving them a fatty like consistence. The stools are generally of a green or dark in appearance, or sometimes assume a green color on exposure to the air. Bloody stools so often met with in adults is not the case in children under twelve years. The large watery and

upon venous congestion of the mucous
membrane of the bowels,
The tongue is red at the tip and
Edges and covered in the centre
with a thick fur. The mouth which
is moist at first soon becomes
dry and red, The abdomen is
relaxed unless made tense by the
hands of the Examiner, Fever
always accompanies this form
of diarrhoea, but only lasts
for a few days, Before its
decline the fever is generally
considerable, Strong, the full-
ness high 140 or 150 per minute
with well marked exacerbation
resembling common intermittent

fever. Emaciation is rapid
the flesh becomes less firm
wrinkled; eyes sunken; lids
drawn upwards and the child
presents a look of pleasure which
is followed by insensibility.
Anatomical characters. The
lesions are more marked and
severe in the large than in the
small intestine, though they are
found in both, hence the name
enteric colitis. The mucous membrane
is swollen and injected and presents
little spots of an erythematous
character, and can be pulled off
in strips if softening has not
commenced, and the mucus

membrane is also thickened,
The solitary glands of small
and large intestines are involved. Peyers patches are infected
but never ulcerated. The Solitary
glands look as though small
particles of sand had been thrown
on their surfaces, and when squeezed between the fingers a small
amount of purulent matter will
be discharged. The Rectum is generally affected, when it is, there will
be tormina and tenismus with
mucus stools. The ulcers which
are found scattered over the
mucus surface presents a grayish
appearance about their edges

They are generally oval or round in form. The submucous cellular tissue is not generally involved. The peritoneum rarely involved and hardly ever perforated by ulceration. The mesenteric glands are generally enlarged.

Erythema of the buttocks and inner part of the thighs are often almost constant anatomical lesions, caused by the acidity of the evacuations.

Age. Infants are less liable to the disease under consideration [illegible]

[illegible] between the ages of [illegible]
is primarily [illegible]
Smith says that observations
in institutions in which [illegible]
-dings have been taken, show
that the younger the infant the
more liable it is to be found
with this disease under unfavorable
hygienic conditions, Dr
Smith says will apply very well
to hospital practice, but it
[illegible] conditions will
increase more between the
ages of six months and two
years than at any period of
Diagnosis, Incubation of

[illegible] It is likely to be
[illegible] but it does
not generally appear before
18 months of age, and the
child generally shows evidence
of [illegible] eleventh.
Prognosis. Is generally favorable
after the first dentition provided
proper hygienic and medical
attention. But convulsions during
[illegible] of teeth, with
[illegible]
the approach of death.
Treatment. This disease in
[illegible] of infancy demands some
[illegible]

According to [illegible]
[illegible] [illegible]
Consistent [illegible]
it occurs in an intermittent
form, with normal [illegible]
and caused from [illegible] marsh
exhalations, its effects should be reduced, if it is running, it
should take the heart less frequently, for a few cases at the
period of the crisis of the patient is strong and young, and
the fever runs high a few
American weeks around the
arms will be found to do good,
but this treatment should be
[illegible] with great [illegible]

infant has a tendency to
disease & life will end
- gums are the symptoms of the
complaint. As this disease
is caused often by bad air and
improper alimentation, than any
thing else they should receive
our first attention, & if they
are properly attended to the
children will get over
this & many of
all, and unless this is done
the constitution given will never
have the desired effect, milk
is the best food, & the infant
is ever nourished it should be
confined to the breast milk

[illegible] of the [illegible]
[illegible] manner it [illegible]
[illegible] [illegible] it
[illegible] If this cannot be
[illegible]. Cases [illegible]
[illegible] may be given
[illegible]
[illegible]
[illegible] found [illegible]
[illegible]
[illegible] and [illegible]
diarrhoea a diet consisting
[illegible], Clean or raw meat
[illegible] found to [illegible]
all other things have failed
In some cases milk will dis-
agree in every form [illegible]

it, the ... Cream. Give it raw.
Cream dinner ...
butter. Then meat ... may be ...
or taken separate ... [illegible]
... [illegible] ... [illegible] ...
... when the ... [illegible]
failed to digest any ...
article of food, a few spoon
of scraped raw meat will be
Eagerly Eaten and digested and
be ... [illegible] ...
resume to be Excreted by ...
ready irritated alimentary canal.
The best way to prepare the meat
... to, scrape it and rub it through
a sieve until it is ... [illegible]
... [illegible] ...

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

at which it must be given

[illegible]

means called in, after the medicine

has done its work if it has

been proper to give any astring-

gents, and the acids and Spirits

should be given, there are a

great variety of accompaniments

or flavorings as shall [illegible]

[redacted]

gallic and tannic acids, to
wash [illegible] of Cinnamon
Empirium & C. but all the
Organic astringents depend
upon gallic or tannic acid for
their virtues, so some can
the cortex vegetable astringents
fail., the stomach animal as-
tringents should then decline.
A acidity of the Evacuations
or of the substance vomited
be present as is shown by the
breath very sour and gum
drops, Chalk should be given
as [illegible] of the officinal mixture
with a few drops of dilute

[illegible] be applied to the abdo-
[illegible], they should be covered
with oil silk and bandaged
to the child. If the child is
not too weak a bath of 96
90° will be found to do good.
If [illegible] the child [illegible]
[illegible]
[illegible]
[illegible]
as vomiting, fractional doses
[illegible]
[illegible]
[illegible]
grains or grains and a half has
[illegible]
[illegible]

[illegible] a dose of opium at first and continue the Calomel afterwards by its self. then there will be no occasion of narcoising the animal, there also good when the stools are not [illegible] or very colour-. -ishness; a deficiency of bile or when the odor indicates putrifaction of [illegible] in the alimentary canal,

℞

Hydrargyri Mas gr iii
Pulv. ipecacuanhae gr iii
Succ. [illegible]
Pulv acacia aa ℈ ii, m
ft Chart No, [illegible]

In any case,

As such

a

Magnesia mixture if the stomach is not too irritable, - But

in any

of the child,

Ammonia when there

appears of falling sickness,

been used when ready to the

, Aromatic spirits

of Ammonia is also very good,

In the early part of the disease

be used; there

is found pain, or pressure especially

if it is circumscribed,

ordinarily

parallels and turpentine
stupes will be found useful
the bran bath composed of
a handful of oak bark to
the bath, will be found good
in the early stages of the disease
being both tonic and stimu-
lating in its action.
In Erythema typhosum
should be employed after the
[illegible]
[illegible]
[illegible]

[illegible]

wounded never mend how
long it takes, for it may
become strangulated. This
may be done by supporting
the margins of the wound with
one hand and closing up
the bowel with the other,
if, as it has been wounded
it must be kept in by a
compress and bandage and
by the use of [illegible]
position,

Eléolage

à la Faculté de Médecine
de Paris,
pour obtenir le grade de
Docteur en Médecine,
par
Victor Constant Ruy, Ernest
de Paris.

Soutenue le 7 Février 1873.

Etiology

Etiology from αἰτία-"cause" and λογία discourse.

The doctrine of the causes of disease

Whatever is capable of deranging any of the functions, or any part of the structure of the body whether it be a form of matter or merely a quality condition or action is entitled to be ranked among the causes of disease

They are of course very numerous and various

almost every thing in nature which is brought in any way in connection with our bodies

Causes of disease are either Internal or External

Examples of the Internal causes are an accumulation of urea in the blood, an excess of uric acid in gout, a morbific principle in rheumatism supposed to be lactic acid, &c

Examples of the External causes are, the different kinds of miasma, the

various species of virus,
various (Qu) malarial poisons
together with the various
agencies of disease by means
of wounds or injuries
Disorders which originate
in the mind are among
those which belong to the
Internal causes. Over
exertion of the mind, and
undue prolongation of
mental application and
intense and long continued
Emotional excitement
are conducive to disorder
of the nervous system

together with more or less impairment of the vital forces Insanity and minor forms of mental derangement are frequently traced to such causes.

Causes may be distinguished as Ordinary or Specific. Ordinary causes are those to which all persons are more or less exposed and may give rise to two or more kinds of disease for instance Atmospheric vicissitudes are ordinary causes of disease which

frequently give rise to a great variety of diseases.

Specific causes are those which produce exclusively one peculiar disease which can be reproduced by no other causes. E.g. The several contagions and certain poisons.

Traumatic causes are those which give rise to disease by acting upon the part affected in an appreciable manner. Anything which causes a wound or injury to any part of the body,

whether Internal or External,
is called a Traumatic Cause
Another is into Predisposing
and Exciting causes
The predisposing causes
of disease are certain
tendencies which some
persons have to take
particular diseases, while
others who have been similar-
-ly exposed escape. These
tendencies are called pre-
dispositions and their
causes predisposing
The agencies which call
them predispositions into

action are the exciting causes
of disease
Whatever influences are
necessary to sustain the
ordinary vital functions if
perverted excessive or deficient
give rise to some disorder
among these influences are
the atmosphere, moisture,
temperature, light, food, drink
clothing &c
The air may prove hurtful
from being loaded with
noxious gases. There may
be too much or too little
moisture. The temperature

may be too high or too low
or may produce disease
by sudden changes. Excess or
deficiency in the quantity
of food or drink or food
of an inferior quality or
that which cannot be
digested may by their
individual or combined
effects produce disease
When there is too much
or not enough clothing worn,
or, much more frequently,
when the clothes are too
tight as to compress the
body and thus interfere with

the development of the various organs and the proper performance of their several functions, as is especially the case in young females the effect is very pernicious

The foolish fashion of dressing young children in short clothes and leaving their lower limbs only covered by a thin hose is often productive of disease. Over exertion of the body and mind, sedentary habits, mental inactivity, hunger

thirst, and the over in-
dulgence of both these
appetites are prolific
sources of disease.
Of excrementitious matters in
the body, yet strictly separate
from its ~~structure~~ organization
are intestinal worms
and other parasites
animals, unhealthy se-
cretions, retained excrementi-
-tious matter, intestinal
& Mucous concretions.
The agents which are
not necessarily related to
the system in health but

act upon it injuriously
by enumeration. They
may be divided into -
Mechanical causes - such
as wounds, bruises and
those which cause death
or injure life by suffocation,
strangling &c
Physiological causes - which
act through the peculiar
susceptibilities of the system
and their relation to these
susceptibilities. In this
class are ranked all
stimulants not necessary
to health as alcoholic liquors

condiments &c which, when
taken in moderation do
not produce any perceptible
harm but when abused
are the causes of very great
evil. All poisons which
do not act by chemical
decomposition are among
this class

Chemical causes - whose
action is by decomposition
of the living

Heat - A certain amount
of heat is necessary for
the healthy performance
of all the functions but

when in excess it becomes
a morbid stimulant
increasing the force and
frequency of the pulse and
producing over excitement
of the organic actions.
Its local action is inflam-
matory. Beyond a certain
degree it becomes a chemical
agent and produces death
of the part by coagulating
the albumen
Heat occasionally acts
with great energy upon
the brain producing
true stroke

Cold — As an excess of heat acts as a morbid stimulant so cold acts in the opposite manner; it causes depression, under the local influence of cold the tissues shrink, the capillaries circulate the blood less vigorously, sensibility is impaired, the part becomes pale from the want of blood. Should the cold be continued and increase circulation ceases entirely, sensibility is lost and local death ensues.
When there is a long continued

influence of a moderate degree of cold it is apt to wear out the powers of reaction especially when aided by want of blood &c Cold affects us frequently through the atmosphere; cold from wet clothing, especially wet feet, is often the cause of disease

Water — The influence of water upon the system when in excess is decidedly sedative; it differs from cold in that its depressing effects have no apparent tendency to produce reaction

it operates by penetrating the tissues and lessens the action of parts and also impairs their powers. Habitual exposure to this cause of depression induces disease of debility, the system is rendered liable to inflammations which partake of the prevailing character of debility, and are apt to assume a low sub-acute form
Water taken in excess acts as a mechanical stimulant to the secretory organs by distending them and thereby giving the necessary stimulus to secretion.

The habit of drinking water copiously may induce dyspepsia

Light – Has little observable influence over any of the organs or functions except the eye, upon this organ it acts as a stimulus, which, when in excess, is capable of completely paralyzing the sense of vision. If it is admitted in less amount but still in excess it may produce various degrees of irritation and inflammation

Atmospheric Dampness.

This is an abundant source of disease. Very many of the gases and exhalations from decomposing

animal matter are capable
of so impregnating the atmosphere
as to render it a source of
disease. Carbonic acid gas
when in a certain degree of con-
centration is poisonous; if breathed
when pure it causes spasmodic
closure of the glottis and complete
asphyxia. Sulphuretted Hydrogen
is a most violent poison;
it is capable of destroying life
no matter by what avenue it
may enter the system, whether
by the Lungs, Stomach, Rectum or
Skin, in minute quantities it
occasions nausea, drowsiness

and nervous forms; in large quantities, Stupor and convulsions, in concentrated State sudden prostration and fatal Asphyxia.

Miasmal — This is the term given to those causes of disease arising from moist soil in certain regions of country where there is vegetable decomposition going on. The circumstances which appear to be necessary are, heat, moisture and vegetable decomposition. It is proven that heat is essential from the fact that on the appearance of frost the diseases caused by miasmata are generally checked

and they rarely occur except in latitudes where a certain high degree of temperature continues for some time. Miasmata have an affinity for moisture; water appears to have the property of dissolving and retaining them, it is probably owing to this cause that heavy rains lessen the miasmatic influence; they appear to wash the noxious matter from the atmosphere.

Winds appear to be capable of carrying the miasma for a considerable distance; hills or mountains frequently stop the course of miasma. Intermittent and remittent fevers are diseases caused

Contagion - By this term is meant any product of disease which is capable of producing the same disease in another person. Contagion is usually the product of secretion or exhalation and may be either in a solid liquid or gaseous state. In the solid or liquid state it acts by contact as in syphilis. In a gaseous state it is transmitted through the atmosphere. Contagion as a general thing does not extend its influence for any considerable

distance. It is frequently transported for considerable distance in merchandise clothing &c

The time at which contagion begins to exhibit itself after exposure varies from two or three days to as many weeks. As a general thing persons who have a disease produced by contagion are exempt from a second attack, but there are many exceptions to this rule.

Most Respectfully Submitted,

W. Augustus Rogers

Thesis on

Acute Articular Rheumatism.

by

Charles. E. Sadtler

Lutherville.

Maryland

February 1873.

Acute Articular Rheumatism

This is an inflamation of a particular sort in a joint; or several joints. It differs from common inflamation, by not being accompanied either by an exudation of lymph in the surrounding tissues or by suppuration

It is very rapid both in its onset and its disappearance.

It is most commonly attended by some degree of Muscular Rheumatism.

Rheumatism is never fatal per se, But by some of its complications; When death occurs during an attack of Rheumatism, an examination of the affected joints shows them to be distended with a serous fluid.

There is a tendency to complication by the inflamation of the fibro serous tissues, particularly the Pericardium

and Endocardium.

When these tissues take on inflamation, it is accompanied by the usual results, as exudations of plastic lymph and, very rarely suppuration.

Most authorities consider the heart complication as a local manifestation of the same diseased state of system, which is also indicated by the articular trouble, the latter being the first symptoms of it. This theory would seem to be confirmed by the results of treatment, for when treatment is promptly instituted, the disease may be averted, and the heart complications prevented.

The heart not being involved in the milder attacks, would also tend to prove that in both cases it depends on the same morbid state of the system, which, being affected in a minor degree produces the articular disease, and when it is more strongly acted on, tends to include all fibrous tissue and by election that of the heart.

In following up the course of the disease, we find fever a prominent symptom, and constant during the whole of the attack; it may occur as a premonitory symptom, though pain and soreness in the joint implicated, will first call the attention of the patient to the attack.

As the disease progresses the pain in the joint affected becomes more intense, and is especially aggravated by motion or pressure; it will generally be relieved by perfect rest, consequently the patient is confined to bed, as the most favorable posture.

The swelling being due chiefly to excess of liquid in the cavity of the joint, slightly increased by effusion into the surrounding tissues; it is more noticable in the more superficial joints, as the knee, elbow, ankle and wrist; in the hip and shoulder the greater mass of overlying muscle disguises the inflamation.

The redness, which takes irregular shapes, is due to the Erythema of inflamation, and it extent generally measures

the gouty state of the stomach.

The affection may be confined to one joint or may include several, either simultaneously or in quick succession.

It also possesses the property of Metastasis, leaving one joint suddenly, the swelling and pain of which disappearing, and as suddenly developing itself in another joint.

Great irregularity exists in the number of joints affected, but in their location a law may be traced, namely, for instance, if two joints are implicated, either both will be on the same side of the body, or if they are on different sides, they will correspond, as both shoulders, or be analogous as knee and elbow.

Of the large joints, the [illegible] most commonly affected, and the elbow the least so.

All the fibrous tissues of the body are liable to be attacked by rheumatism, as the ligaments, the walls of the intestines and bladder, and even the sclerotic coat of the eye.

The fever is not always in direct proportion to the severity of the attack, and indeed not generally very strong; the pulse [illegible] exceeds 90° per minute, and the temperature in the axilla 102°

The perspiration in this disease is very abundant, and emits a sour odor; small vesicles of Sudamina appear on the surface caused by the irritating character of the secretion.

The tongue becomes coated, thirst is increased, and the appetite lost; the action of the bowels becomes irregular, at sometimes constipated, at others relaxed,

The urine is scanty, of great specific gravity and high colored, owing to the increase of urates and decrease of water in the system, on cooling it deposits a red sediment, it is sometimes albuminous, and may be discharged [illegible]

Cerebral complications are not common, though a delirium is sometimes observed; this may in a measure be owing to the altered state of the blood; there is [illegible] loss of sleep, the patient being kept awake by pain

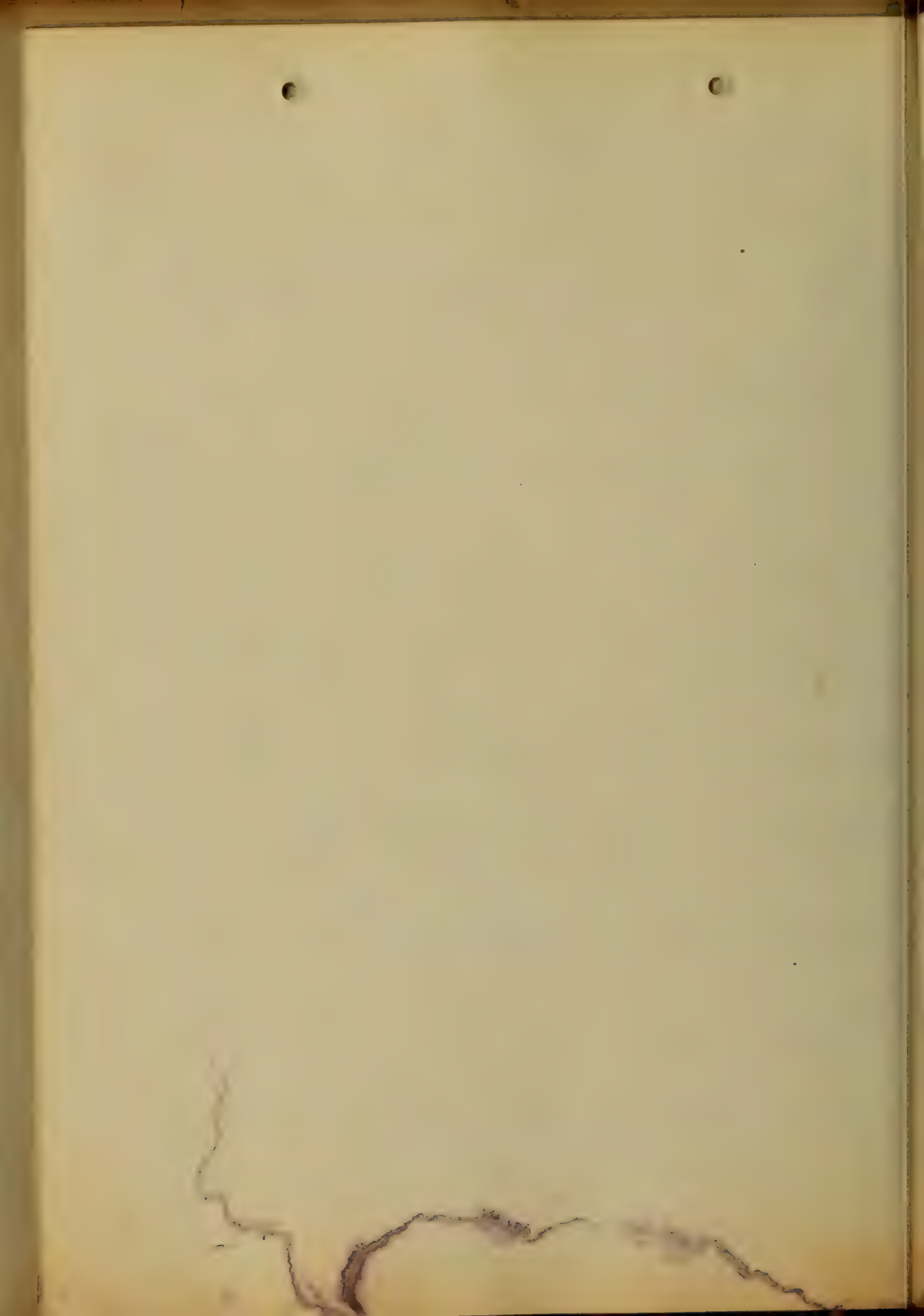
The frequency of Endocarditis and Pericarditis as complications
of [illegible] has been over rated.

When Endocarditis occurs, the affection is most common about the mitral valves, and generally gives rise to lesions of [illegible]; when Pericarditis occurs it is said to be also accompanied by Endocarditis

The heart is complicated on account of the fibrous nature of its coats, and may be affected in any part of the course of the disease, though more commonly in the early part; when the disease becomes chronic, the danger of heart complications [illegible].

The inflamation here differs from that in the joints, by exudation of lymph, and even suppuration, so that the heart tissues are sometimes destroyed.

Rheumatism, [illegible] as is also [illegible], but are [illegible] cardiac complications.



Meningitis [illegible] though Rheumatism would hardly seem a sufficient cause for it, yet it would think be highly predisposing to any disease, Uremia, which might have an exciting cause.

The disease is self limited but the extremes are [illegible] may take place in a few days, or [illegible]

[illegible] complications [illegible]

Very obvious fluctuations exist in the course of the disease which does not run on directly to a termination, so that apparent changes for the better cannot be relied on.

What is Rheumatism? or is the whole system affected by the same cause, judging from the number of joints often inflicted and the variable character, [illegible] analogy between the affected parts, it would seem probable that the same cause [illegible]

This is now the accepted theory.

[illegible]

[illegible] contains an acid & some salt.

Uric acid has been suggested, but as it has not been found in excess, in blood drawn from Rheumatic patients, it would seem to depend on some other agent.

The [illegible] appears to be Lactic acid [illegible] existing here, even this hypothesis implies some [illegible] agent as the cause of the Materies morbi being in the blood, of this we are ignorant, so that we can only [illegible] is the direct cause, the remote one not being known.

This acid is formed within the body, partly by the decomposition of sugar, & [illegible] in the [illegible]

Whether the presence of the acid is due to the excess of its production, or to the want of destructive assimilation is uncertain, however the acid being in the blood produces an inflammation which continues as long as the cause remains.

The thought was suggested to my mind that the question

of the blood may have been brought about by a functional disorder of the kidneys.

Any cause suspending temporarily the action of the kidneys, may [illegible] to the congestion of these organs with blood charged with the acid which the kidneys [illegible] in a state of health eliminates. This agent brought into contact in a state of stagnation, with the fibrous tissue of the kidneys, produces a similar effect to that produced on the system at large at a later period of the disease; so that the [illegible] [illegible] [illegible]

at a time when the kidneys are impaired in function, accor[illegible].

[illegible] over to bring to bear on the subject, either to sustain or refute the views [illegible], I will have to consider it as only a conjecture till further expe[illegible] enables me to test it.

The morbid element in the blood acts preferably on the [illegible] tissues, and most readily on those of the joints.

The cause is generally assigned by non-professional persons [illegible] would [illegible] [illegible] thus detaining in the system the morbific agent; or if the rheumatic diathesis exist they may act as exciting causes.

The diathesis may be inherited as well as acquired, whole families who have never undergone sufficient exposure to ac[illegible] for its production, are often liable to it evidently inherited.

[illegible] [illegible] [illegible] [

but has been known as early as the 1st year, after the age of 30
the liability to the disease diminishes year by year

Males are more commonly the subjects of this disease than
females, probably on account of the greater amount of ex-
posure to which they are subjected.

Climate and temperature are of some influence, as it occurs
more frequently in temperate climates and most changeable tem-
peratures, and is almost unknown in the Arctic regions and Tropics.

To use the words of Dr. Hooker, "Although all the
circumstances, the exact causes leading to its production are equally
unknown, and can only be approached by conjectures."

The diagnosis of the disease is easy. It is usually commenced
by a slight swelling or thickening of the joint, which is
confined chiefly to the inner joints of the Phalanges which
the patient never touches, and by the latter in pinching
more than one joint.

When the joints are affected they are enlarged

[illegible] the fever and the pains, the [illegible]
[illegible] suddenness of the attack and retrocession; all [illegible] to
[illegible] the existence of Rheumatism.

A purulent collection in a joint may resemble Rheumatism
but the history of the case will render the diagnosis
[illegible]

[illegible]

[illegible]

adopted, the followers of each claim for it the superiority.

As the disease is of such uncertain duration and having a tendency toward recovery without any medicine, it is very difficult to determine which, [illegible] of [illegible] and [illegible] by any [illegible]

Veratrum Viride, Gelsemium, Aconite, Bitter [illegible] the alkalies have been tried and recommended, but observation in a large [illegible] that none of these systems of medication alone is sufficient to [illegible], so that by a judicious [illegible] the best results may be obtained.

[illegible] would be a long and disagreable aid at the same time fully as successful [illegible] the alkalies, [illegible] omitted by Colchicum or other adjuvant.

The alkaline treatment [illegible]

practitioners, the remedies most commonly used are the Bi Carb: of Potassa and of Soda, or the Tartrate of Soda & Potassa, or any alkali easily yielding of its base.

The advocates of this plan claim that by its employment the duration of the disease, and lessen the danger of Endocarditis and Pericarditis.

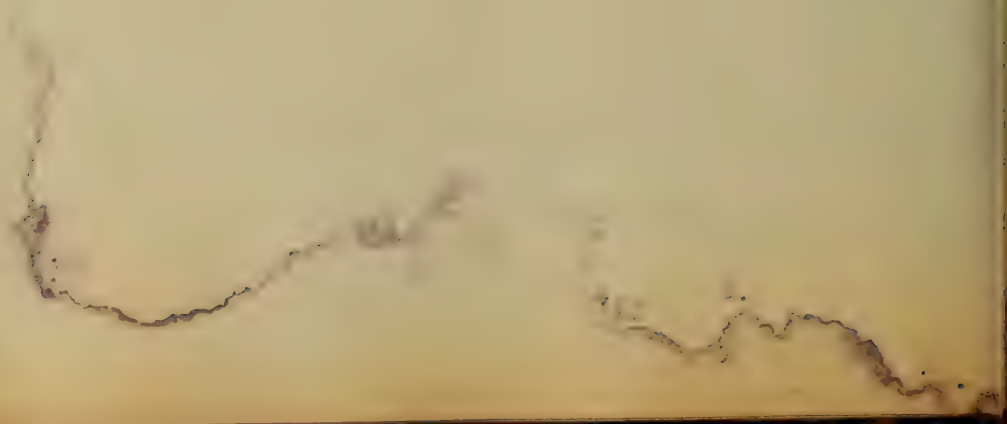
When this treatment is promptly instituted and continuously carried out, for 24 hrs, which will fully alkalize the blood, when complications are feared, as in this case or the real danger is at an end, and the object of treatment is attained.

In this plan of treatment the urine should be tested every 6 hrs with litmus paper, and if found acid additional alkali should be given, and if found alkaline the alkali should be omitted.

The theory of an acid being the Materia Medica suited this kind of treatment; the production of the acid, arising from an unknown cause, cannot be prevented, but that which is already in the blood may be neutralized, and bass ex off in the urine; thus producing diuresis by a diuretic, or by the use of an agent which will fulfill both these indications as Bi Tart Potassa.

To obtain the best results and the protective agency against future complications, the remedy is given early in the disease and in large doses frequently repeated, so as to promptly alkalize the system, which will be indicated by the alkaline reaction of the urine.

Failure to obtain the agency of the acid in the blood, as in [illegible] Bi Tart Potassa in Diabetes Mellitus to neutralize the acid or [illegible] by inducing diuresis and by salts in the system, by the



...m of medication the urine becomes alkaline in 24 hrs.

The frequency of the dose may be increased. thus taking less time.

When the mine has become alkaline the danger ...
...t complications ceases, and the patient is say ...
...the condition is kept up; the doses required to ...
... the alkalinity should be given at much greater
...tervals, as only 2 or 3 in 24 hrs.

Colchicum is given as an adjunct to assist in
the elimination of the poisonous principle; Acetate
or Bi Tart. of Potash are used for the same purposes.

Podo. Pelt. ... tight ... , ... and ... ...
...tion acc... ... ...
in the blood, but ... ...
... Iodide will ... ... production
... the alkalinity, but will serve to keep it up.

Bitar... ... ...
... ...ts of the alkali to the Gall of water.

In addition, [illegible] or
[illegible], and may be used in the dose Quinia gr v, Bi Carb Potassa grxxx.

The elimination may be assisted by sweating, [illegible]
[illegible] Dose a Dover Powder given at bed Time will suffice.

[illegible] a diffusible stimulant such as [illegible]
in [illegible] glass of water.

Chalk may be used in [illegible], and given with [illegible].

[illegible]

Drinks of Soda water and Lemonade, may be allowed unless the stomach [illegible].

Treatment and [illegible] of [illegible] a nutritious diet and tonics, especially the preparations of Cinchona.

Local treatment is necessary, the affected joint may be covered with a [illegible] moistened with an Alkaline Solution, an opiate mixture, Gr
Morph or Chloroform Liniment, [illegible]

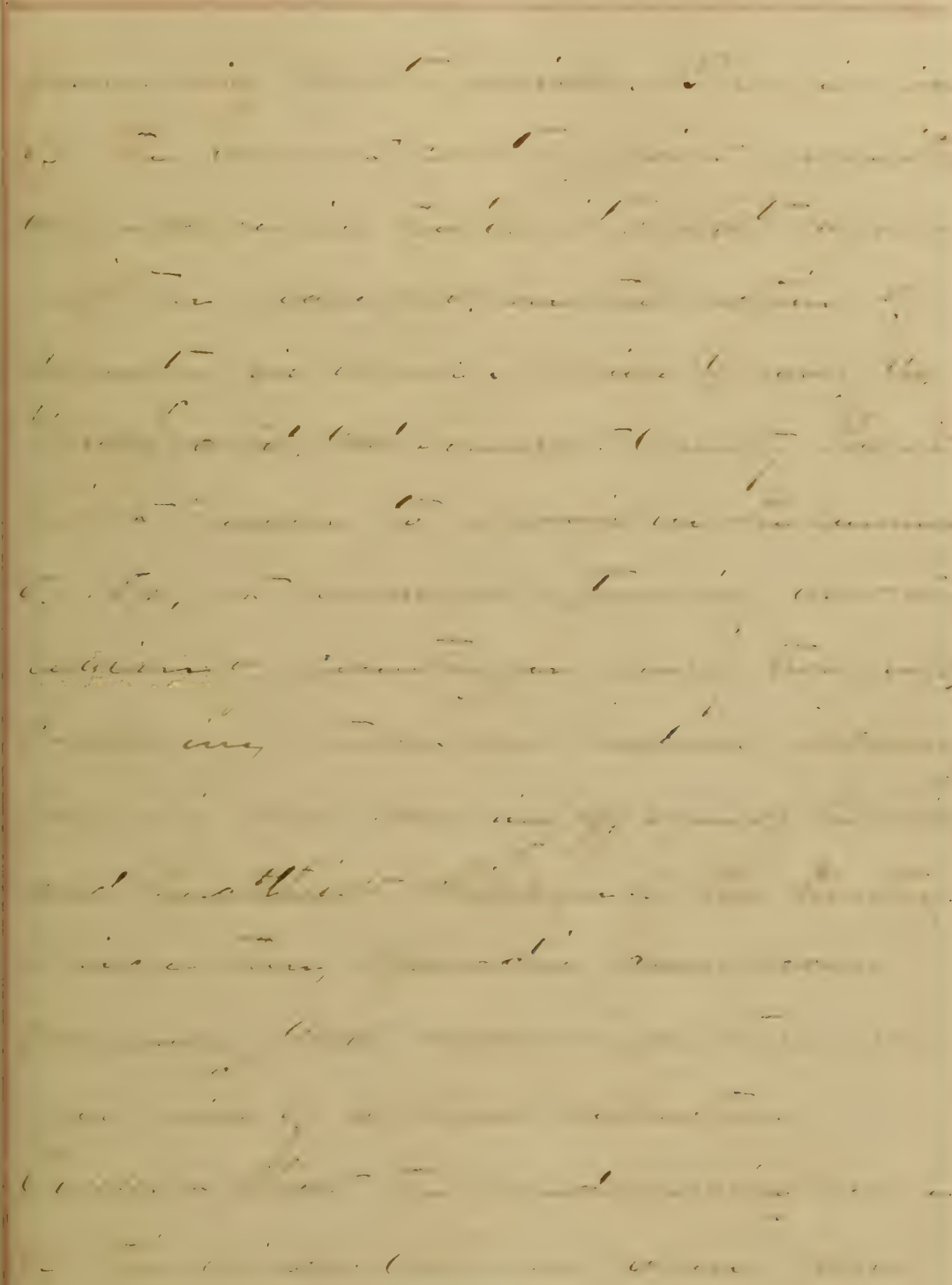
[illegible]

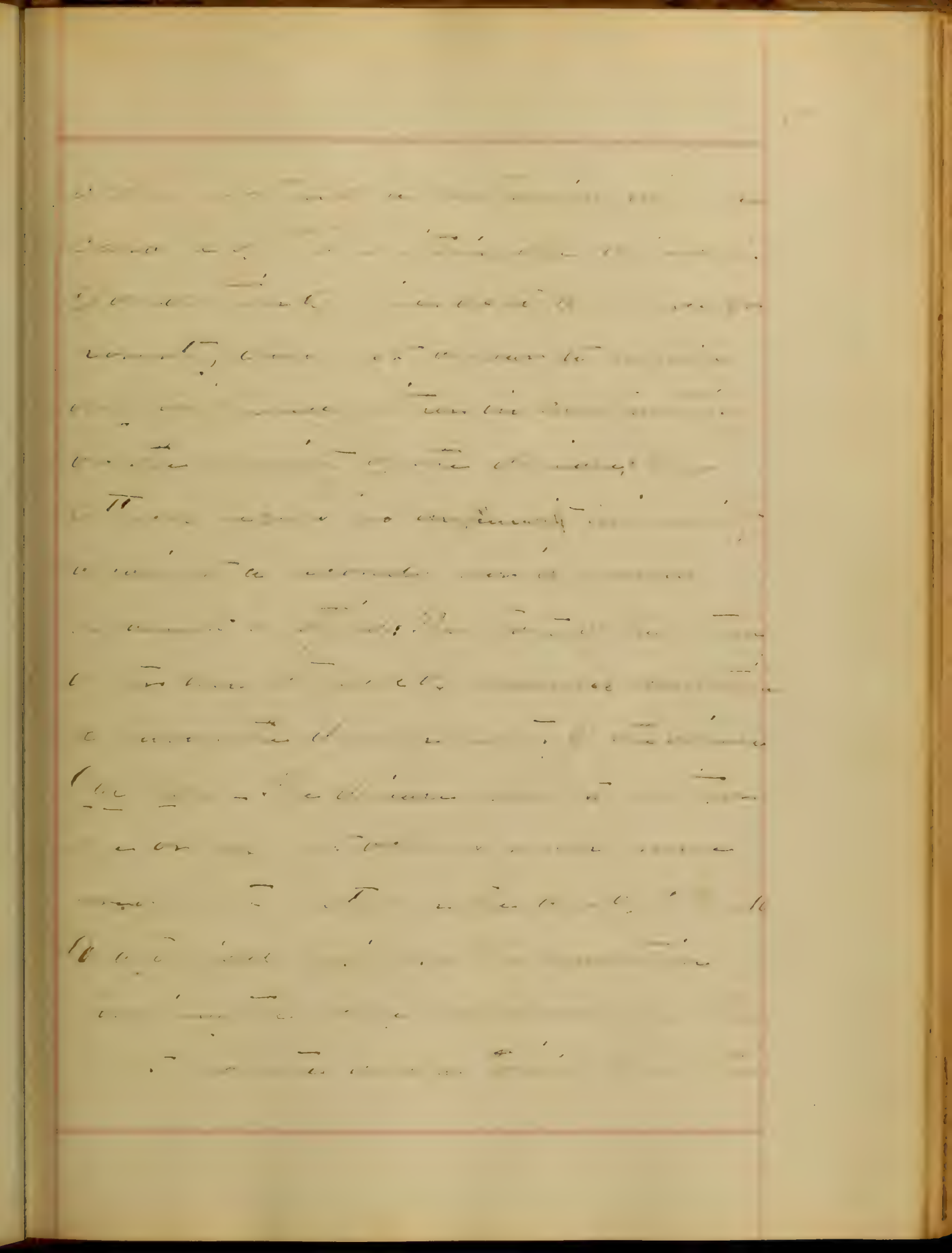
As it makes no material difference which plan is used, the influence of the patient may be consulted in the choice of local treatment. Friction over the joint affords temporary relief.

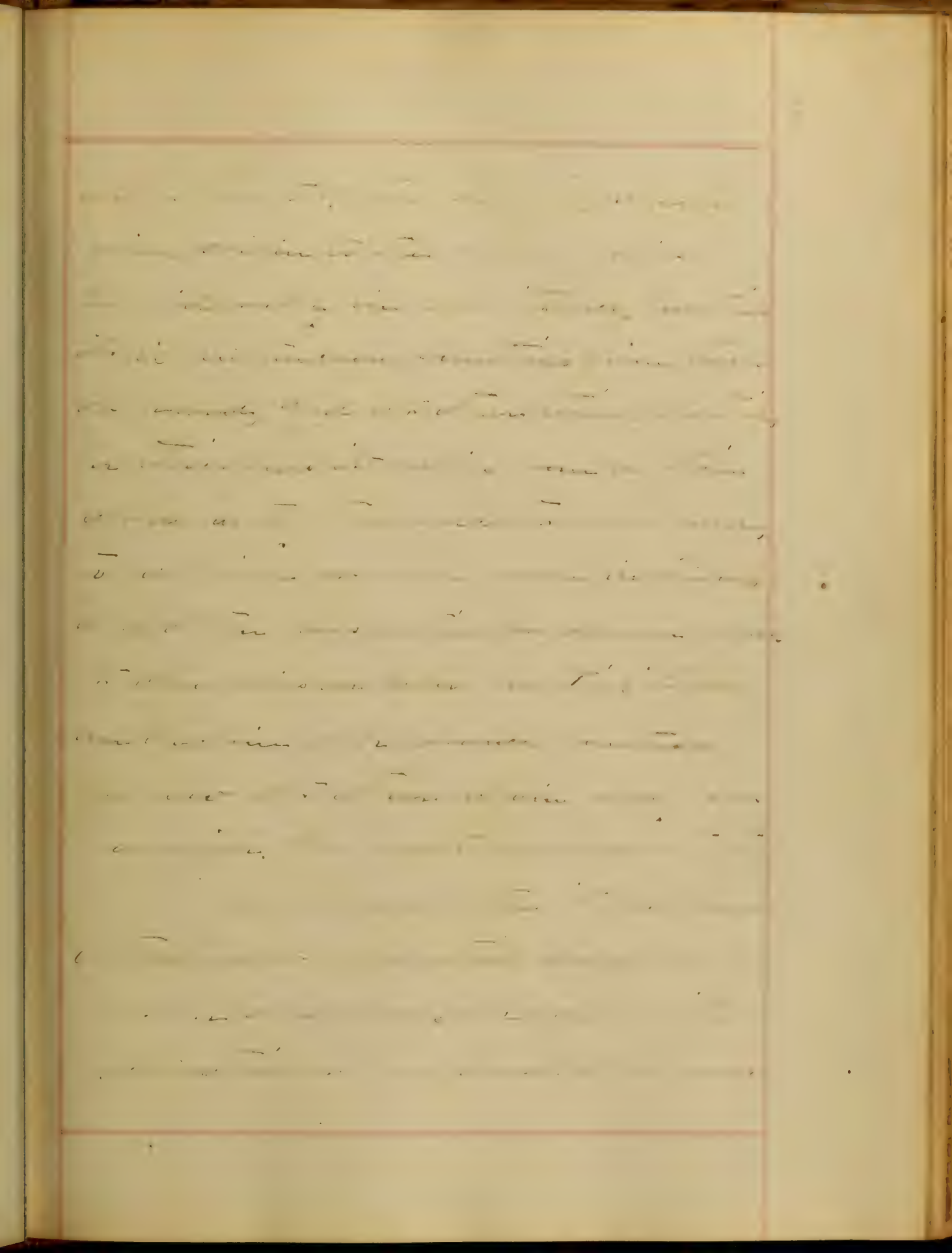
A more recent plan of treatment by means of blisters, has been introduced by the French, who claim for it perfect success, and [illegible] state that if Endocarditis have existed before the beginning of the treatment, it will be relieved.

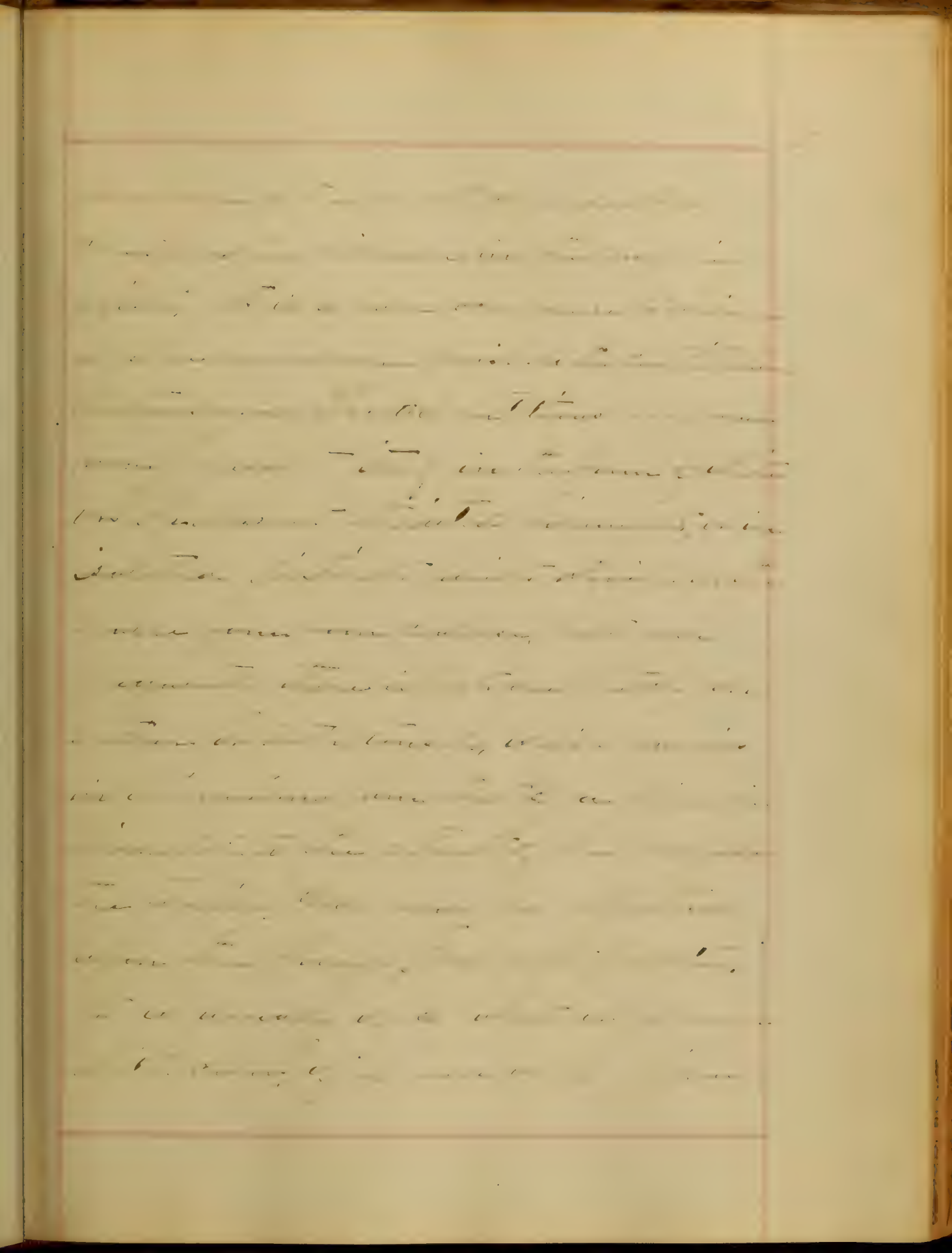
Another recent remedy is the Syr of Lime, not carried to [illegible] with [illegible], once in to day or six and for in a [illegible], [illegible] to [illegible], the plan will [illegible] [illegible] [illegible] and prompt results.

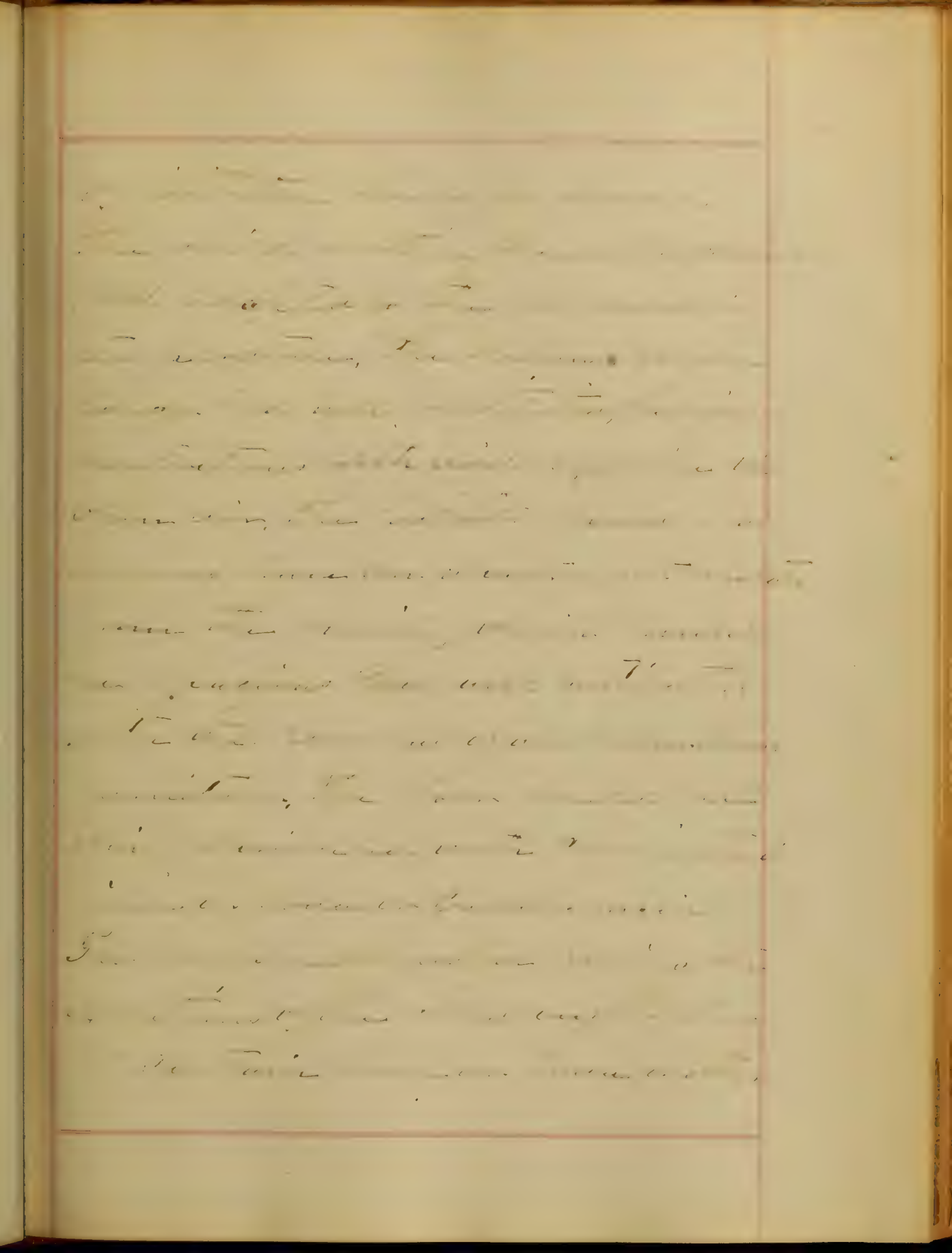
Of the treatment of Endocarditis and Pericarditis of Rheumatic origin, I will say nothing as it would often [illegible] to [illegible] for the [illegible]











An

Inaugural Dissertation

On

Typhus Fever

Submitted to the examination

of the

Provost, Regents and Faculty of Physic

of the

University of Maryland

for the

Degree of Doctor of Medicine

by

Niel C. Gilmore

Pennsylvania

Quincy Ills.

Typhus Fever.

Typhus Fever is an acute specific disease lasting from fourteen to twenty one days, characterized by an eruption of its own that appears between the third and sixth day, eminently contagious, and forming strongly marked epidemics. Typhus Fever has received a multitude of names, as Spotted Fever, Petechial Fever, Epidemic, Putrid or Malignant, Camp, Jail and Ship Fever. The word Typhus from τυφος (stupor) introduced by Sauvages in 1759 is now generally adopted by all writers, as it has the negative merit of not involving any hypothesis concerning the nature and seat of the disease.

Morbid Anatomy.

The disease has no special anatomical characters, the only characteristic changes that can be appreciated in Typhus is in the blood. The blood is particularly liquid and dark. It is stated that blood drawn

from the veins during life, and placed under the microscope shows that the corpuscles are crenate and misshapen, and do not adhere into rolls but run in amorphous heaps. After death the appearances are observed to be the same in the blood. It is either not coagulated at all, or forms in the heart and great vessels large and very soft clots. The proportion of fibrin is stated to be diminished and that of the red corpuscles to be increased, while urea and ammonia are said to have been found in the blood. According to the researches of Lehmann the fibrin, corpuscles and albumen are all in excess at first, but the amount of corpuscles diminishes in the later stages, causing the blood to have a lower specific gravity. The abdominal lesions characteristic of typhoid fever are wanting, the Peyerian and solitary glands of small intestines are unaffected, nor does ulceration of them which is so constant in typhoid fever ever occur in Typhus. The spleen is

frequently enlarged and softened. The kidneys are sometimes found congested, enlarged and friable. Cerebral congestion and effusion of serum into the ventricles of the brain, the subarachnoid space and arachnoid cavity are not uncommon. Hypostatic congestion of the lungs and pulmonary oedema are more frequent than in typhoid fever.

Symptoms.

The period of incubation in Typhus fever is not satisfactorily determined. Patients generally take to bed on the second or third day after the first manifestations of illness. The invasion is generally marked by headache more or less severe, loss of appetite and general malaise. Rigors are of frequent occurrence, but they are not so definite or so severe as in smallpox. In severe cases the disease begins very suddenly with chills, headache and sometimes vomiting. For three or four days the symptoms get worse, and are accompanied by sleeplessness and gen-

eral pyrexial symptoms, thirst, heat of skin, pretty complete anorexia and a peculiar prostration. In an average attack the patient lies prostrate on his back with a most weary and dull expression of face, his eyes heavy and with a dusky flushed spread uniformly over his cheeks. In a more advanced stage he lies with his eyes shut or half shut, moaning and too prostrate to answer questions, to protrude his tongue, or to move himself in bed, or the mouth is clenched, the tongue and hands tremble, and the muscles are twitching and half rigid. The dryness of the mouth, the sordes on the teeth and lips, the hot and dry skin and the deafness are other symptoms which strike an observer so immediately as to deserve to be included in the clinical history of the disease. Temperature. The temperature of the body as determined by the thermometer is more or less raised, and varying in

the course of the disease from 102° to 107°. The maximum is generally attained in the middle of first week between the fourth and sixth days, and then a slight fall takes place. A sudden and considerable rise of temperature renders probable some inflammatory complication. There is generally a well marked remission about the seventh day; in more severe cases there is no trace of remission at this period, but the temperature maintains itself steadily or rises a little. The absence of this remission marks the case as likely to be a severe one. In the second week the temperature rises again but only for a day or two; the elevation may be from half a degree to two or three degrees, which often lasts but one evening. According to the analysis of Dr T. J. Maclagan of 58 cases ending in recovery, he gave the average temperature in the morning a fraction over 102° and in the evening a fraction over

103° Fahr; the highest point reached in any of these cases was a fraction over 105°. The fall of temperature in Typhus as well as in other fevers not infrequently denotes convalescence. Circulatory System. The pulse in Typhus is always accelerated; in a case of medium severity in an adult being about 120, in slighter cases not exceeding 80 or 90. From the time of attack; on the one hand to that of improvement or death on the other, the pulse seldom fluctuates or falls; it rises steadily up to its maximum in favorable cases, maintains the same moderate excess for several days, and then subsides uniformly and rapidly. In graver cases the pulse continues to rise until the crisis of the disease is reached. A fall in the frequency of the pulse in the majority of cases indicates the commencement of convalescence, and a subsequent rise signifies the accession of some local

complications. Skin. A characteristic eruption occurs in a large proportion of cases of Typhus than of typhoid fever. Thurlston states that it occured in 408 cases out of 3506, a fraction over 11 per cent, Dr Flint found it to exist in 57 out of 5 cases. This eruption, constituting a measly or mulberry rash of Typhus forms one of the principal diagnostic evidence of the fever. Jenner describes it as consisting of two portions. The one is a faint, irregular, rusty red, fine mottling, looking as if it lay some distance below the surface of the skin and were seen through a semi-opaque medium. To this appearance he expresses as the "subcuticular" mottling. The other part of the eruption is formed by separate spots of small size and purplish color, scattered over the mottled surface, and looking more or less superficial. These are the

macular of Syphilus. They are roundish in shape, and in color vary from brightish red to livid, fading into the color of the adjacent portion of the skin. In the course of a day or two they are no longer felt raised above the surface. As a rule the eruption appears on the fourth or fifth day, may be met with on the third, and rarely is delayed as late as the seventh day. It first comes on the wrists, the borders of the axillae, and about the epigastrium in many cases it covers the whole trunk, and frequently also the arms and legs. Sometimes met with on the face and neck. The copiousness of the Syphilus eruption represents generally a corresponding gravity of the disease. The duration of the eruption varies. In slight cases it may not last more than two days, in cases of medium severity it may last

from 12 to 14 days. But in severer cases it may not disappear until the twenty first day or even later. Nervous System. From the very outset of the illness these symptoms occur, consisting in rigors headache, and weariness of body and mind. Giddiness sometimes continues up to the time of crisis, and constitutes one of the most distressing parts of the illness to the patient. In a large proportion of cases— delirium is a symptom of typhus; it supervenes usually between the fourth and eighth days. The patient often fancies that he is two or three people, and is undergoing several sets of miseries and horrors. In extreme degree the patient is occasionally seen, praying, howling, blaspheming, according to his habitual turn of mind, or leaving his bed to escape imaginary ill treatment. In severer cases the

delirium passes into a busy stupor, and trem-
ulousness of the tongue and hands with twitch-
ing of the muscles (subsultus tendinum) is then
commonly observed. Convulsions occasionally oc-
cur and of almost certain fatal augury. They
are epileptiform in their character, lasting a few
minutes only, and giving place to profound coma,
in which the patient dies with or without repe-
tition. Coma and convulsions occuring in Typhus
as well as in typhoid fever are generally attrib-
utable to uraemia. Digestive System. The
tongue becomes coated with a thick, brown,
or black coating. It is with difficulty protrud-
ed. Sordes occur more frequently, earlier, and
in greater abundance in Typhus than typhoid
fever. Diarrhoea and tympanites is often absent
in Typhus and when present is generally slight.

On the other hand constipation is most always present. Hemorrhages from the bowels is one of the rarest events in Typhus. Intestinal perforation does not occur.

Urine. The urea and uric acid are generally increased as in cases of typhoid fever. The chlorides are greatly diminished or disappear entirely. In most cases the urine is darker than usual until about the third week when it becomes pale, and is of acid reaction, probably not more so than in health; as the free acid is found sometimes to be only half the normal standard. Albuminuria is of more frequent occurence in Typhus than in typhoid fever, and its early appearance, its abundance and duration denote gravity of disease.

Causation. There is no possibility of doubting the contagiousness of Typhus, which is shown by the successive occurence of cases in particular houses and

neighborhoods, by the number who are the first of persons brought into contact with Typhus patients, especially in hospitals, either as physicians, attendants or fellow patients, and by the importation of the disease in localities where it did not previously exist. Overcrowding, deficient ventilation, especially if conjoined with immutrition, are powerful auxillary causes acting in conjunction with contagion. As to the exciting causes of Typhus, the great if not the only one, is the specific poison of the disease transmitted from person to person by contagion or fomites. Evidence of which is seen in its epidemic spread when it enters a community of susceptible persons. Diagnosis. The diseases from which it is most often required to distinguish, are measles and typhoid fever. The eruption of Typhus is sometimes a good deal like that of measles,

but of smaller proportions than in measles, and scarcely ever has any crescentic shape; but the occurrence of spots on the face by no means excludes Typhus. In measles the temperature suddenly falls about the sixth day, while in Typhus it does not occur so early or so completely. From typhoid fever, Typhus is usually pretty easy of diagnosis. In typhoid, the invasion symptoms are far more insidious than in Typhus; rigor, and headache are less marked. In early stages of typhoid, epistaxis is sometimes observed, a symptom very rare in Typhus. The eruption of typhoid appear later than that of Typhus, rarely met with before the seventh day in typhoid, while in Typhus its appearance is seldom postponed so late as this. The most essential distinction between the two eruptions is, that, that of Typhus comes out in

single crops, while in typhoid fresh spots appear day after day, and each spot lasts only three or four days. Diarrhoea is much more frequent in typhoid than in Typhus. The stools are generally natural or dark in color, if loose of a muddy consistence; while in typhoid they are yellow, and consist of powdery looking matter suspended in liquid. The absence of the characteristic abdominal symptoms of typhoid, in Typhus viz: meteorism, iliac tenderness and gurgling. In a few words Typhus may be distinguished from typhoid by the following.

In Typhus.	In Typhoid.
No epistaxis nor bronchitis;	Epistaxis and bronchitis;
Bowels constipated;	Diarrhoea
Belly seldom tympanitic;	Tympanites, gurgling &c;
Miliary eruptions 5th to 7th day;	Lenticular rose spots;

Progress moderately slow; Progress very slow;

Death often within 10 days; Death rarely within 14 days;

Countenance dusky red; Countenance purplish red;

Causation mostly obvious; Origin obscure;

Anatomy not peculiar; Lesions characteristic;

Prognosis. The mortality from this disease varies greatly. Of 1692 cases aggregated by Thurchison occurring at the London Fever Hospital in 14 years, the mortality was 18.78 per cent or 1 in 5.27. The rate of mortality is found to vary at different times and places, between 9 and 35 per cent, the variations being due to differences as regards an intrinsic tendency of the disease to a fatal result. The ratio of mortality is greater in males than females, and less in early life than subsequently. After 30 years the fatality progressively increases, and after 50 years the proportion of deaths

is nearly one half. Of 63 cases analyzed by Dr Flint 12 were fatal, that is 1 and a fraction over 1 in 5, or a fraction over 18 per cent. Thayne and others found in private practice to be about 1 in 20, which is due no doubt to their being under more favorable treatment or circumstances than hospital patients. Probably 1 in 11 or 15 would be a fair average. Unfavorable signs are, great feebleness, or extreme rapidity of the pulse; profound coma, hiccough, suppression of the urine, involuntary defecation, considerable clusters of the surface, a high maximum temperature, as 107° or above, extreme prostration and subsultus, albumen in urine, vomiting, uncontrollable diarrhoea. Pneumonia as a complication increases the danger.

Treatment.

The treatment of Typhus according to the best models

ern physicians should be expectant, that is the symptoms should be watched and treated as they arise, but no effort should be made to cut the disease short, it must be allowed to run its course. In the earliest stages before reaction has commenced little treatment is usually necessary, and, indeed there is seldom an opportunity for prescribing, as the patient is not seen until after the stage has passed, sometimes however it is more than ordinarily protracted or severe it becomes necessary to employ remedies. Opium has been recommended, under those circumstances as, in order to rouse the system out of its apparent torpor, and to direct action to the surface. It is sometimes useful when depression is not too great. Quinine and sulphate of Zinc are the remedies to be preferred. If the fever has become established, it may be proper, in cases

of oppressed stomach and constipation, an efficient cathartic may be given, so as to thoroughly evacuate the bowels, as sulphate magnesia, rochelle salt, citrate magnesia or calomel, though in this febrile state is highly, with considerable justice, the saline purgatives are to be preferred. Throughout the whole course of the disease, if there is a tendency to constipation, the bowels should be kept open by cathartics. The question as to the propriety of bleeding in early stages of fever has been much discussed. By some the remedy has been urged as to the greatest importance; by others it has been condemned as almost always injurious, and scarcely ever necessary. It is my certain, that in genuine Typhus, it is often capable of doing much harm. But though thus injurious if abused, there are undoubtedly cases of Typhus fever in which bleeding may be attended

with safety and advantage. If the patient is weak, faint, low, and if there is much gastric action, with cerebral disturbances, and quick pulse, the abstraction of even a few ounces of blood is attended with striking effects. Cups or leeches may be substituted for the lancet. The febrile heat may be relieved by the external application of cold water, or which is better, bringing the patient in the tepid water. Sometimes spirit or spirit diluted with water, may be advantageously substituted, the effect of these remedies is to relieve the distressing heat, relax the skin, and to procure a gentle sweat, to the great comfort of the patient. The mild refrigerant diaphoretics may also be used, such as the neutral mixture, effervescing draughts, solution of acetate of ammonia and sweet spirit of nitre. Camphor however is often very useful in producing diaphoresis, quieting the hands and producing sleep. Stimulants are useful in

the treatment of typhus fever. Sometimes it is necessary to administer them from the onset of the disease; when the fulness of the pulse, the commencing dryness of the tongue, the sordes about the teeth, and the same nervous of the extremities; indicate the commencement of prostration. The quantity of stimulants given must be regulated by the degree of prostration, and the effects produced. French Brandy and the Wines and Sherry wine are the most efficient. Carbonate of Ammonia is also a good stimulant, dissolved in water with the addition of gum arabic and sugar to obtund its acrimony. Milk punch is admirably adapted to many of these cases, combining nutriment in best form with powerful stimulant. If on trial the stimulus diminishes the pulse, and skin becomes more moist, the restlessness and delirium is quieted, the stimulus has done good, and should be continued. If on the contrary a warm humid and

harder pulse follow, with heat of head and dryness of skin and milder delirium or deeper stupor it should be stopped, for a while at least, or if given diminished in quantity. When there is violent cephalalgia, coma, and delirium after the abstraction of blood, it will be proper to shave the head, and affuse it with water, spirits and water, distilled vinegar, or cologne water freely. Sometimes great relief is obtained by warm fomentations about the head, when the cold affusions fail. Catheterism may be needed for retention of urine. Purging and injection should determine very stay the state of the bladder. Irritation of the stomach and bowels are to be combatted by the ordinary means, opium internally and revulsive applications or antispasmodics externally. Hypostatic hemorrhagia may possibly be prevented by not allowing the patient to lie for many hours together on his back. If time

be turned once in a while upon one or the other side.

If there is reason to suppose that there is any malarial poisoning, the peruvian bark or its alkaloids may be given of which sulphate of quinine is the best. After the subsidence of the fever, the use of tonics both mineral and vegetable, together with light food, pure air and moderate exercise tend to restore the patient to his former health

Report

of

Six Cases

Submitted

in lieu of thesis

by

J. Edwin Michael A.B.

1873

Case I - Typhoid Fever

Case II - Typhoid Fever

Case III - Poisoning by Morphine.

Case IV - Tenea Solium

Case V Lipoma

Case VI - Gonorrhoea

Case I — Jno. Davis.

Occupation Sailor - Age 22.
Entered hospital April 12th
1872 with high febrile
movement - some headache
severe diarrhoea - pain and
tenderness in the right - iliac
region - very irritable con-
dition of stomach - typhoma-
itic abdomen & was taken
with a slight chill, pain
in the loins, limbs and head.
The diagnosis was typhoid
fever - The chalk mixture
and Dover's powder grs. X
were ordered for him.
Sat 13 - A.M.
Temp - 105° F - Pulse 109°

Passed the night comfortably - diarhoea checked - no appetite for breakfast. Continues Terebenthine stupes on the abdomen - also -

℞ Acid Hydrochlor. dil. -
gtts. ~~XX~~ ter die.

June 14.

Temp 105° - Pulse 116

Sleht - tolerably well tongue white with red edges. Abdominal tenderness diminished.

14 - P.M -

Temp. 104½° Pulse 115

Mon 15 A.M

Temp. 104 Pulse 115

Thurs. 18 P.M.

Temp. 102½° Pulse 114

Friday 19th A.M.

Temp. 101° Pulse 130

Friday 19 P.M.

Temp 103° Pulse 118

Sat. 20 A.M.—

Temp 100° Pulse 110

Sat. 20 P.M. Temperature Normal

Temp 99° Pulse 95

Sun. 21 — A.M. Pulse very weak — Fever gone and the patient — very much improved in general. Gave this time forward with the use of tonics and good food the patient — convalescent rapid

by and was discharged from the hospital within three weeks of his first admission. He was freely supplied with beef tea during his illness and occasionally allowed a milk lunch.

Case II Thomas Golden. Occupation - Sailor. Age 24. Entered the hospital some time since with intermittent fever of which he was cured by the usual remedies - The fever had left him in a debilitated condition and he was

under going some treatment in the house. About the first of April 1872 he was seized with a shifting pain in the chest accompanied by very severe headache these symptoms troubled him for nearly two weeks when on Apr. 13 he was attacked with an array of symptoms leading to the diagnosis of typhoid fever. In addition to the head ache there was tenderness of the abdomen especially in the right iliac region - tongue covered with a dark dirty looking

coat - high febrile action
Temp - 103 ℉ - Pulse 102
He was ordered to take
dil - hydrochloric acid gtts XX
three times a day with gtts XX
of Tr. Nux Vom also
Drowsy, prostration gtts X at night
June 14th A.M.
Temp 104° Pulse 108
No sleep during the night - com-
plains of severe pains in the
legs and arms, restlessness
and want of appetite
June 14, P.M.
Temp 103° Pulse 107
Suffering very much eyes
dull and congested. —

Mon 15th A.M.

Temp. 104° Pulse 108

Spent a very restless and miserable night-

Mon 15th P.M.

Temp. 103° Pulse 112

Ordered Magnesia Sol. m x

Tues - 16th A.M.

Temp 103½° Pulse 106

Tues. 16th - P.M. -

Temp - 103½ Pulse 106

Wed. 17th A.M.

Temp 102° Pulse 100

Wed 17th P.M.

Temp 103° Pulse 100

Thurs. 18th A.M.

Temp 101° Pulse 98

Thurs 18 P.M. -

Temp 101° Pulse 84

Friday 19 - A.M.

Temp 100° Pulse 90

Friday 19. P.M.

Temp. 100° Pulse 74

From this time onward the patient - continued to improve until he was as well as he was previous to this attack. But the combined effects of the two diseases the intermittent and the typhoid had so shattered his constitution that when he left the hospital several weeks after the

time of the last notes on
his case he was very anemic
much debilitated in every
way, a fit subject for any
disease that may lay hold
of him. There seemed in
this case to be no tendency
to ulcerations of Peyers
patches, as in the previous
case and hence there was
no indication for the use
of the Ol. Terebinthinæ
which has proved itself
so efficacious in that
class of typhoid cases.

Case III Dr. J. H. C. xxxxxx

Aged 31

Had been for several days suffering intensely from intra-cranial neuralgia and on Thursday Feb. 12, 1872 at 8 A.M. took ℥ of Morphia solution of Morphia X minims equal to one third of a grain of sulphate of Morphia —

At 4 P.M. having experienced no relief from the first dose he took m-XX of the same still suffering at 8 P.M. he took thirty minims more and at 9 P.M. the previous dose having no ameliorative effect he took m-XXX again making

in all three grains of the 2nd phase of Malaria taken in thirteen hours. At eleven o clock he was awake and perfectly bright and cheerful though still suffering with his head. At 12 he had fallen into a sleep similar to that commencing with stertorous breathing which awakened his wife. 12.30 – Dark coloured skin – pulse 120 per minute and very weak – countenance pale – lips livid – pupils contracted to a point and wholly insensible to light – breathing stertorous

and somewhat irregular. Applied large sinapisms to the extremities - gave enema of terebenthine and ordered to arouse him by continual and active agitation At 1 A.M. Pulse 112 and stronger - countenance more natural - breathing more regular but still stertorous - blood the cold douche to the head - At 2 all the symptoms about the same. From this time the symptoms were variable as natural and the stimulants employed in the narcotic effect of the drug

prevailed - the powers of depression swiftly gaining the ascendency - the breathing becoming more and more irregular until about 4.20 when it ceased altogether. All the medicine was given hypodermically. The patient who was subject to neuralgia had on many previous occasions taken very large quantities of Morphia ; at one time as much as six grains of the sulphate in 24 hours and at another a tea spoonful of the powder. The patient ~~he~~ was one of that class

unhealthily to numerous in the medical profession who instead of suffering prefer to run the risk of taking enormous quantities of anodyne agents rather than endure a little pain. On a previous occasion he came very near destroying himself with chloroform.
The fact that the first three doses produced no perceptible effect in this case, I think renders it worthy of some notice as an instance of the cumulative action of Morphia.

Case IV. F. E. M. Aet. 24-
has been passing joints of
tape worm for nearly a
year not knowing what they
were when in March 1871 he
passed twelve feet of the para-
site consisting principally of
the body and tail. Had pre-
viously consulted two doctors
in regard to the joints he had
been passing, each of whom, mis-
understanding the case treated
him with Santonine with, of
course, no effect. The patient
suffered from none of the symp-
toms usually ascribed to tape
worm except constant irri-
tation of the anus caused by

the collection in that region of the disagreeable segments of the worm. The appetite was normal and the patient enjoyed most excellent general health. Immediately after passing the above mentioned portion he took a mixture consisting of

Ol. Terebinthini
Ol. Ricini aa ℥ss.

with no other effect than considerable purgation. There continued considerable pruritus of the anus until June of the same year when the segments again appeared in the feces. The treatment consisted of fasting

thirty-six hours and castings
Ol. Terebinthinæ
Ol. Ricini ana ℥j
at one dose the effect of
which was to expel twelve
feet of the worm, the head of
which, after very careful search
could not be found in the stool.
Pruritus ani still persisted with
excellent general health. For
November of the same year
the segments again appearing
treatment was adopted as fol-
lows.
℞ Fld. Ext. Brayera ℥iv
S - ℥ii three a day
Continue for a week and

after fasting thirty-six hours
take Ol. Terebinthinæ
Ol. Ricini aa ℥i
at one dose. Result:- passed
eight feet of the worm. Continued in excellent health suffering only from pruritus ani.
In January 1871 the segments reappeared and the following course of treatment was adopted. Take of Ext. Filex Mas gtts. $\frac{(40)}{XL}$ on retiring; relieve on arising, also at the same time Pumpkin seeds ℥ij. Follow up with a saline cathartic.
The result of this medication was the expulsion of nine feet

of the parasite. Patient continued as before until March when on a reappearance of the segments he took ℥ij of the Ethl. Ext. of Male Fern in thirty six hours which being promptly followed up with a large dose of Epsom salts relieved him of about eight feet of the tenia. Continued as before until June when medication again became necessary. The patient fasted thirty six hours, taking in the meantime in divided doses ℥ij of Fld. Ext. of Kousso and ℥iij of Ethereal Extract of Male Fern

On the following morning still fasting he took an ounce of the oil of Terebinthine and shortly afterwards passed eight feet of the obnoxious parasite. The Terebinthine brought on an attack of cystitis with severe strangury and haematuria, which kept the patient in bed a week.

Thus in all about fifty feet of the worm were expelled and although diligent search was made in the stools the head was never found. The patient enjoyed good health during the whole time, good

normal appetite and regular bowels, and suffered only from pruritis of the anus and a slight sensation of yearning or sinking in the stomach when food was withheld for a considerable time. It has now been over eight months since the last passage of segments, the pruritis had disappeared and there is very reason to believe that the patient is permanently relieved. The obstinacy of this case, together with several others which have come under my observation have led me

to regard with some degree
of mistrust the statements
of authors who speak with
confidence of the ease with
which this troublesome para-
site can be entirely exhelled
from the body. As has been
seen all the standard rem-
edies were tried and surely
in quantities sufficient for
the purpose, if any were, but
not until as most formidable
combination was administered
was the patients health put in
considerable jeopardy, ever
the dislodgement be effected.

Case V - Mr. J. C. Pxxxxxxx

Occupation farmer Act: 54

Appeared on Nov. 6, 1872 with a large tumor on the back attached by a pedicle, of about seven inches transversely and four perpendicularly, covering the interscabular space and part of the left scapula the upper edge of the pedicle being attached about the vertebra prominens. The tumor was in shape a symetrical flattened ovoid hanging down as low as the lumbar region.

Diagnosis - Lipoma.

Prof. Johnston, at 10 A.M., removed the tumor arranging the flaps so as to form a wound which when closed would present the shape of an inverted "T". There was very great venous hemorrhage during the operation although after the tumor was removed only five small arteries had to be tied. The patient took no chloroform but fainted during the operation from loss of blood, and although he revived before its completion he was much exhausted. The wound was closed with

fine sutures and a simple dressing applied the patient being put on the use of stimulants. 8. P.M. Still very weak suffering from symptoms of loss of blood - nausea, vomiting - pallor, coldness of surface &c Flaps of the wound distended with clot of blood. Wound opened, clot removed and compress applied. Ordered 9 ths. XXX McMunn's Elixir Vii. Sunday 17, A.M. - 8 - Reaction taking place - pulse 90 per minute and firmer, countenance more natural. Beef tea and stimulants were now freely

allowed and the patient improved from day to day

Dec. 19.— Erysipelatous blush about the wound, but less and frequent doses of the muriated tincture of iron relieved it in a few days. Some small abscesses formed near the wound but only gave rise to some local inconvenience

The patient gradually improved in strength. The wound healed kindly and he left for home within a month after his arrival relieved of the load he had been carrying on his back for twenty years.

The tumor weighed six teen and half pounds excluding the blood lost, which would in all probability have increased the weight to at least twenty pounds. And on dissection it corroborates the diagnosis of the profession perfectly - It was a fatty mass divided into several lobes which were separated from each other by a sort of synovial pouch. —

Case VI Mr. M. Exxxx

Occupation - Salesman. Aet - 24

Had connection with a woman on Monday, Tuesday & Saturday nights - and on the following Monday noticed the usual initiatory symptoms of gonorrhoea, tingling sensation in the glans, parting of the lips of the meatus &c and by 8 P.M there was a slight - mucous discharge. At 11 P.M on the same day he injected a solution of nitrate of silver grs ~~XX~~ V to ℥i of water. - Exam. R. M. Profuse purulent discharge and excessive burning pain in mic-

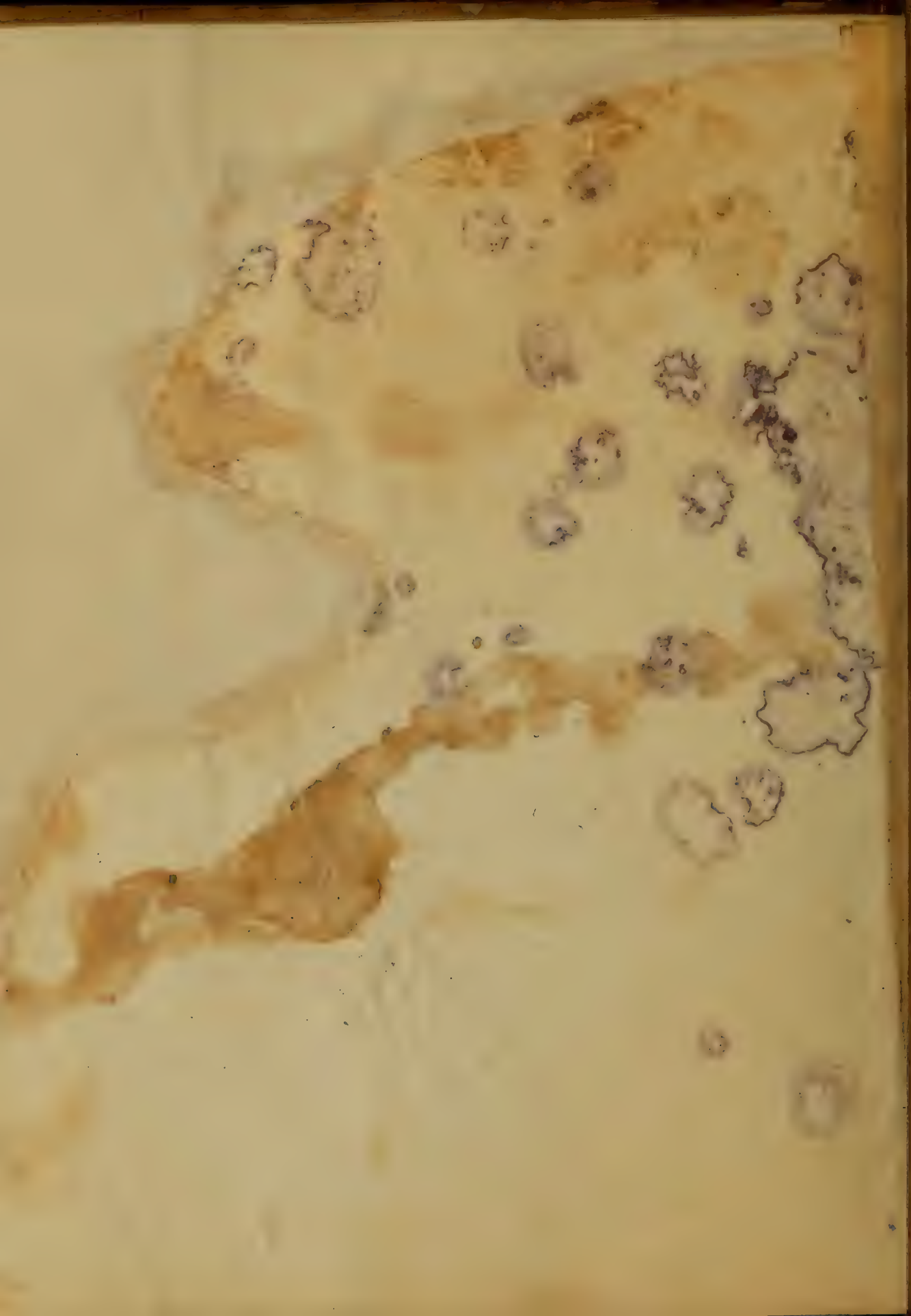
uation. At noon on the next day the discharge much decreased in quantity and the act of micturition not nearly so painful. At 8 P.M. the discharge semitransparent and very scanty micturition comparatively comfortable. On the next morning the patient considered himself well —

This is a fair sample of the efficacy of the abortive treatment of clap if used when the disease is confined to the fossa navicularis

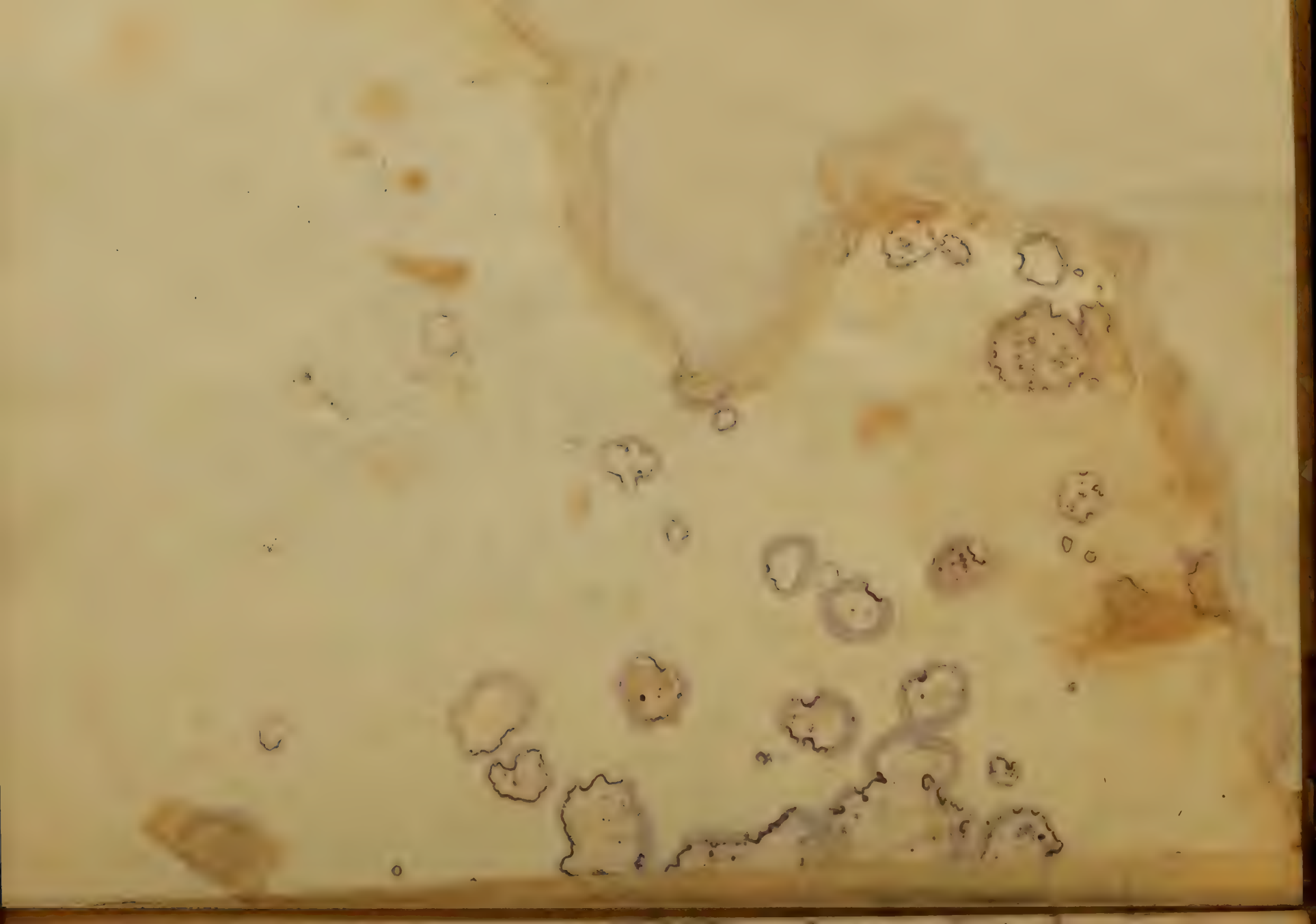
J. C. Harrington

Thesis

1873



An Inaugural Dissertation
on
Typhoid Fever,
Submitted to the examination
of the
Provost, Regents, and Faculty,
of the
University of Maryland,
for the degree
of
Doctor of Medicine,
by
J. Edward Harrington,
of
Maryland.



I

to you now, has been gathered from

J. Edwin Hampton

Thesis on Typhoid Fever.

Typhoid fever is so called from [illegible]
Typhus. It is derived from the Greek words
Τυφος, τυφος. "Mind, stupor resembling
stupor". It is known among the people,
by various other names such as Common
Continued Fever, Enteric, Gastro-Enteric and
Abdominal Fevers. Typhoid was for a long
time considered the same as Typhus fever,
but it was [illegible]

fever stage. [illegible]

Severe [illegible]

such [illegible] and Treatise in writing my [illegible] to point out as possible, the differential diagnosis of [illegible] fever.

Clinical History. This fever generally comes on very gradually and the [illegible] determine the commencement of the first symptoms. Sometimes the period of three or four days or even for a whole week, there may be an indefinite sensation of indisposition, accompanied by [illegible] Soreness of [illegible] the state of malaise. At other

a prodromic stage for several d
There is slight headache, alternate
heat and cold, with impaired
The victims are unwilling to
bodily or mental exertion
wakefulness, dizziness
sight. The tongue is slightly
a thin white fur.
times for several days after the
enough to retain it the
stomach, bowels, the pulse becomes accelerated,
skin hot and dry, with occasional flashes of a
chilly sensation, and the pain in the head is in
creased. We may now consider the disease as
fairly
stage commenced.

[illegible] and upon pressing over the abdomen, especially
in the right-iliac region, we have tenderness
[illegible]; also a [illegible] swelling of the
[illegible] Typhoid, a [illegible]
[illegible] last summer while visiting
patient with a vomiting [illegible]. The fever was more
in the morning, than in the evening,
And that the thermometer showed a de-
crease in the morning, and a rise in
the evening. The [illegible]
[illegible]
Course of this fever, until about the 7th or 9th days

[illegible] at the tip. Examine your patient;
[illegible] you will observe upon the abdomen
[illegible] rose-colored spots, resembling flea-
[illegible], and are said to be slightly elevated,
[illegible] disappear on pressure. Sometimes
[illegible] numerous, appearing upon the upper,
[illegible]
face and neck. About this period, the nervous
[illegible]
excited, and we have stupor, sometimes delir-
ium, but as a general rule there are more
[illegible]
Picking at the bed clothes is sometimes ob-
served, and is an unfavorable prognos-
tic sign. We sometimes have hemorrhages

from various causes, especially from the [illegible]
[illegible] their symptoms, their duration, and [illegible]
severity, vary much, but I am only giving [illegible]
[illegible]

Therefore in making a diagnosis, we must not expect to find every sign and sy[mptom] present in all cases, but rest our diagnosis upon the most important ones. Perforation of small intestines sometimes occurs, but gener[ally] [illegible] is supposed to be convalescing, and the [illegible] generally developed abruptly. The eruption is [illegible]

This should be remembered [illegible]
The urine is of a high specific [illegible]

[illegible] said to continue [illegible]
[illegible] acid, and the [illegible]
[illegible] found in many cases. [illegible]
we have a cough present, but this is not a sign
[illegible] we find on [illegible] any disease
in the lungs. The duration of the [illegible]
[illegible] of the attack, is
seldom less than two weeks, and may continue
for a month, or more. One
considered the average time of it's continuance.
There are, four, or five modes of death from
disease. We may have death caused by an
[illegible] poison in the
system, from Cerebr
[illegible] Prostration, and from Perforation & Exhaustion.
Anatomical Lesions. The Lesions consists of
an inflammation, and ulceration of the

[illegible] [illegible] [illegible] [illegible]
[illegible]. [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible]
[illegible]

introduced into the system by some [illegible]
animal effluvia in a state of incipient decomposition. But it often originates without any such exposure. Certain it is, that every vaccination of the present day should be disinfected with [illegible] and in some other [illegible]. Typhoid could not be frequent in its visitation. Professor Hosack says the "warm dry summers favor the occurrence of it." Cases in the autumn [illegible]. Typhoid seems to have a preference for age. The infant is rarely attacked, and the old person is seldom troubled with this form of fever. It [illegible] more frequently between the ages of fifteen and thirty. The period of incubation
It cannot easily be determined [illegible] lasts. You can very rarely determine when

XI.

The most common, and the most frequent is hard to determine, but a great many set it down as two weeks.

Diagnosis.

[illegible] by giving the most important symptoms of Typhoid fever, and then the [illegible] by which it can be discriminated from other fevers. The most characteristic symptoms are [illegible], the [illegible], [illegible] tongue, the [illegible], the [illegible] pulse generally above 100 beats. The [illegible] in the right iliac region, the [illegible], [illegible], [illegible], pain in the back and kidneys in the [illegible], the temperature of the body and finally the [illegible] eruption. The last is a [illegible] sign. Of course all of these symptoms [illegible]

case. Only a few may be presented here
may not be very well marked. But they
particularly kept in mind the treatment of
symptoms. By the careful use of the thermo-
meter you may sometimes make out the symp-
toms with much certainty. The gradual rise
of the temperature in the morning, the
fastigium, the stage of hyperpyrexia, the
discrimination has to be made between Ty-
phus, Bilous Remittent, and in the child,
different forms of intermittent.

The Temperature Symptoms of Typhoid Fever

In Typhus	In Typhoid
Very persistent and remittent	Often remittent
Rapidly rises to fastigium	Slow rise
Seldom hyperpyrexia obtains. Temperature steadily	Hyperpyrexia & Symptoms sometimes supervene
rises.	

red.

There are also some other distinctions of
importance in the lesions on post-mortem
examination, are not the same. Typhoid
are not spreading exanthem. The eruption
is not so
as a general thing. One Contagious, the other
not. From
be
Color
its short duration, and tendency to end in Inter-
mittent,
lent,
made in our diagnosis. We also have con-
stipation as a general thing in Remittent fever,
And the abdominal symptoms, and epistaxis
are also wanting in Remittent. The appear-
ance of the

s. By the use of Disinfectants

may make out this diagnosis

without any trouble

Diagnosis.

The fever proves to be the most fatal of diseases.

Where the patient is placed in such a

position where all of the laws of hygiene

can be followed out, the mortality is not

so great, than otherwise. The effect

of quality seems to have a different effect

upon this disease. The mortality being

The disease itself is very seldom fatal

[illegible] pneumonia supervene, it may be a cause of death.

[illegible] Secondary diseases

sometimes cause of death, such as [illegible]

disease of kidneys &c. If a patient [illegible] by

typhoid fever have their feelings & the

clothes [illegible] [illegible]

temperature of body kept. The [illegible]

[illegible]

Treatment.

The principle object to be kept in view and the most

important one is, to sustain your patient [illegible] the

disease, it being a [illegible] [illegible]

[illegible] to [illegible] [illegible] [illegible]

capabee of cutting it short. If the cause

be due to a morbid poison in the system, to remove it if possible, by promoting elimination not only of this poison, but of products, produced by metamorphosis in the blood and tissues. To reduce the temperature of the body. To support the System by stimulants and in full to meet each & every symptom as it presents itself. Unfortunately we have no drugs to eliminate the suppposed poison. A great many have been recommended but have proven of not much avail. To promote an elimination of the morbid products in the system, we may use Diuretics, Diaphoretics and Purgatives. If called to a patient, and find but little diarrhoea, or if Constipation should happen to exist (which is rare) a mild laxative may be given, and after this no Purgative should

be given. A saline cathartic, or small dose of Castor oil (Olium Ricini) may be used. Generally there is diarrhoea, and no laxative is needed. If the diarrhoea be copious, it may be checked somewhat, but not entirely, for Nature requires the system to get rid of some of the morbid products. As a Diaphoretic Liq. Ammoniae Acetatis and Spiritus Aetheris Nitr. may be used. The Sulphites & Hyposulphites are thought by some to have a good influence in both Typhoid & Typhus, but they do not seem to arrest the course of these fevers. You may give a Nitrous Powder modified, but it is best to leave out the Tartar Antimony, when the fever runs high. Effervescing draughts are beneficial at times. Cold applications to the head when the skin

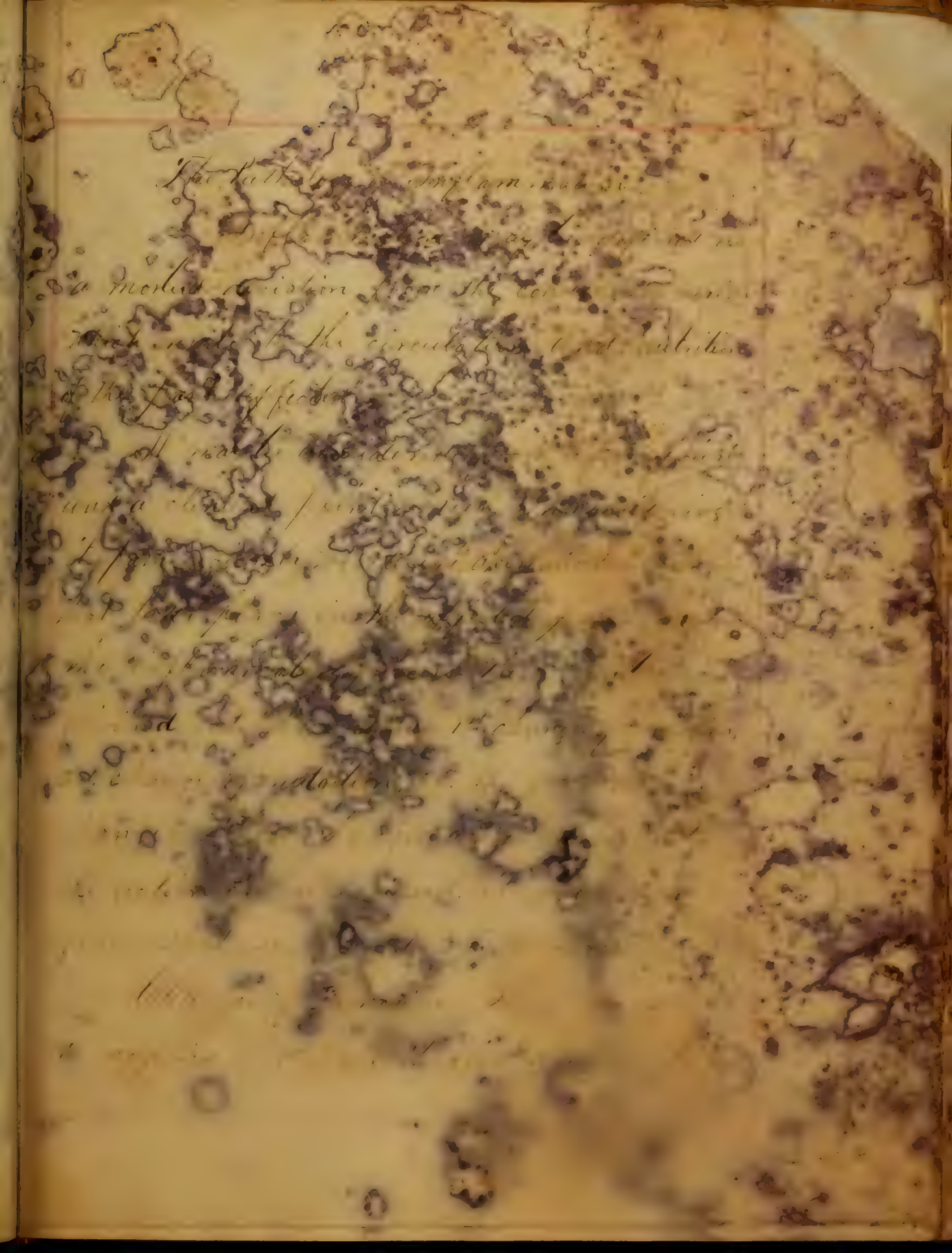
is hot and dry. The mineral acids are consi-
ered by some very useful., Some prefer the
Phosphoric acid, others Nitro Muriatic, and
Hydro Chloric. They may be given in Doses
of from x to xx minims, diluted. The mode
in which the acids act, is by destroying
the Super-alkalinity of the blood. The
Oleum Terebinthinæ introduced as a remedy
in this disease, by Prof. Wood, of Philadel-
phia, has now a great reputation. It is
recommended in latter stage of Typhoid
fever, especially when tongue is dry,
and hard, and the Abdominal Symp-
toms marked. It may be given in
doses of from five, to twenty drops,
every two, or three hours. If the diar-
rhoea be excessive it may be checked

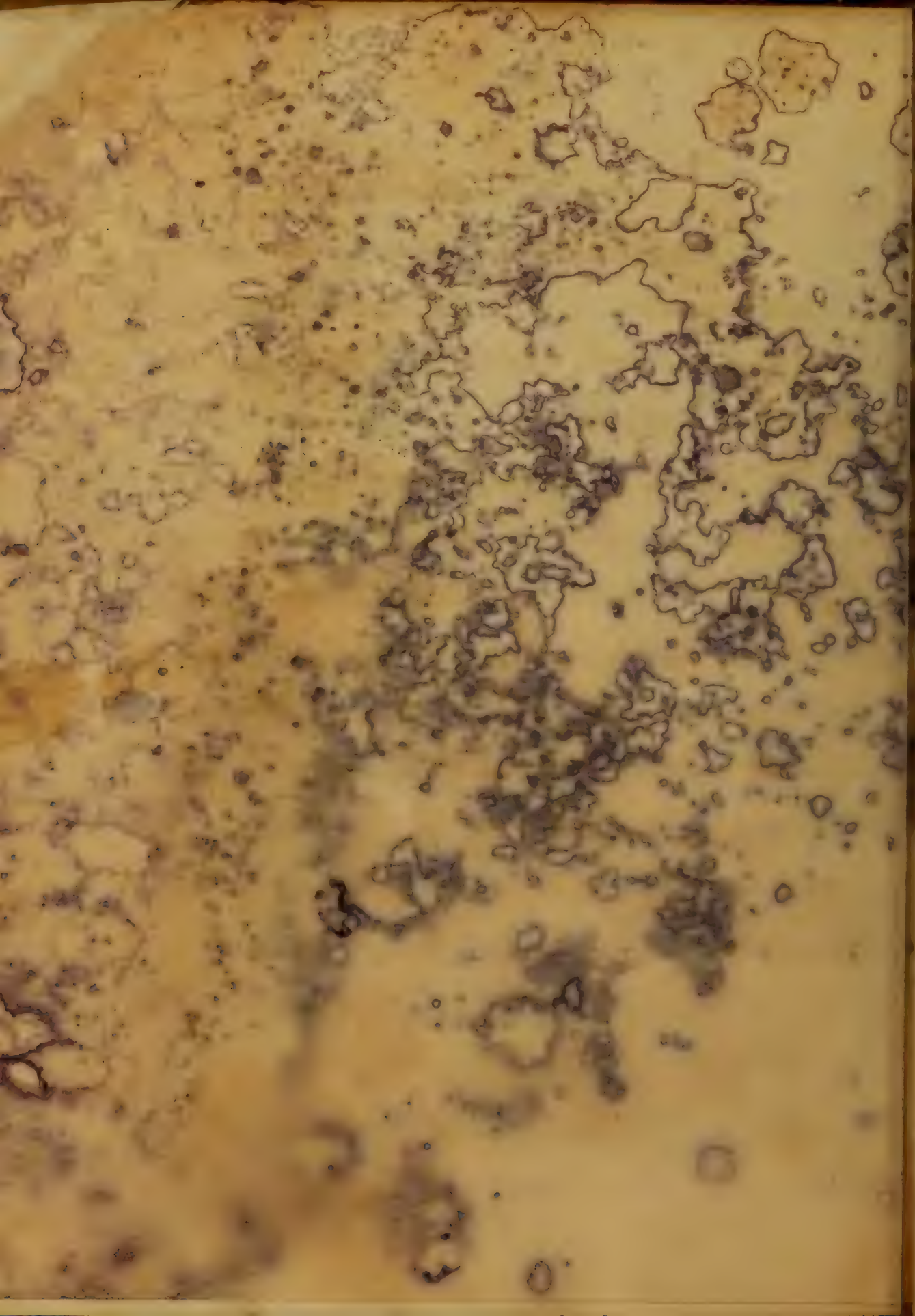
somewhat by opiates, and astringents. If the patient be very restless, and unable to sleep, small doses of Opium, and Tartar Emetic (1/4 gr) former to 1/8 gr of latter) may be used, or xx to xxx grs Hydrate of Chloral is sometimes employ with efficacy. Stimulants. It is best not to give Stimulants untill late in the disease, when the pulse is weak, and feble and heart sounds obscure. You may use Brandy, or some other form of Spirits. A good effect is shown by increase force of the hearts action, and diminution of cerebral Symptoms. The most important part of treatment relates to the hygiene. The room should be well

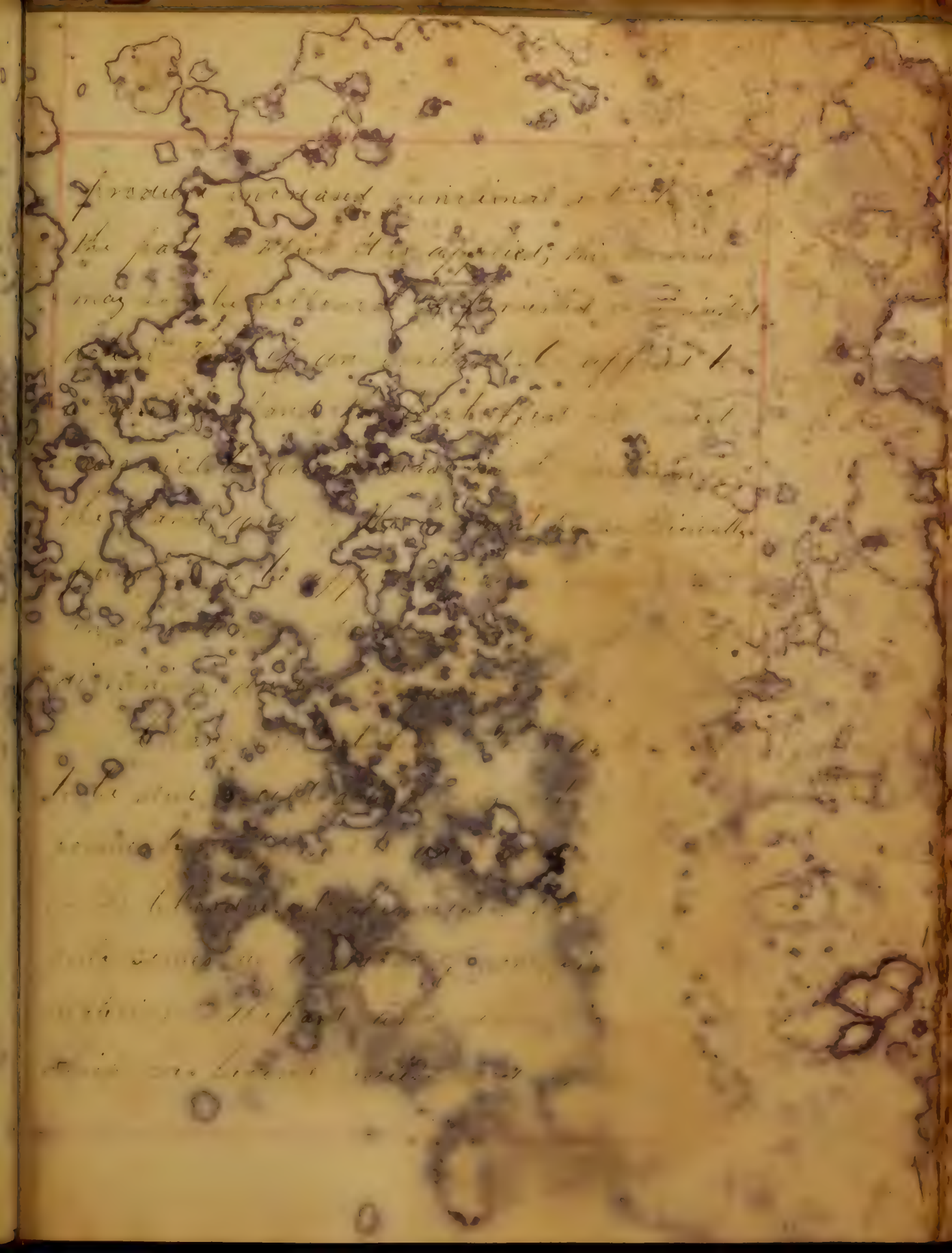
ventillated, and kept at a proper temperature, with an abundance of fresh air. With these precautions, the patient may be conducted safely through this disease in by far the majority of Cases. Attention to the state of bladder to prevent, or relieve retention of urine is most important. Long and protracted cases may demand a great deal of care to avoid bed sores. The complications which are most apt to occur in this disease, namely Peritonitis and Intestinal hemorrhage, should be watched for, and when they occur be treated by the free use of Opium, and measures to to support the powers of life. Intestinal hemorrhage should be treated with astringent remedies in conjunction with Opiates, and rest.

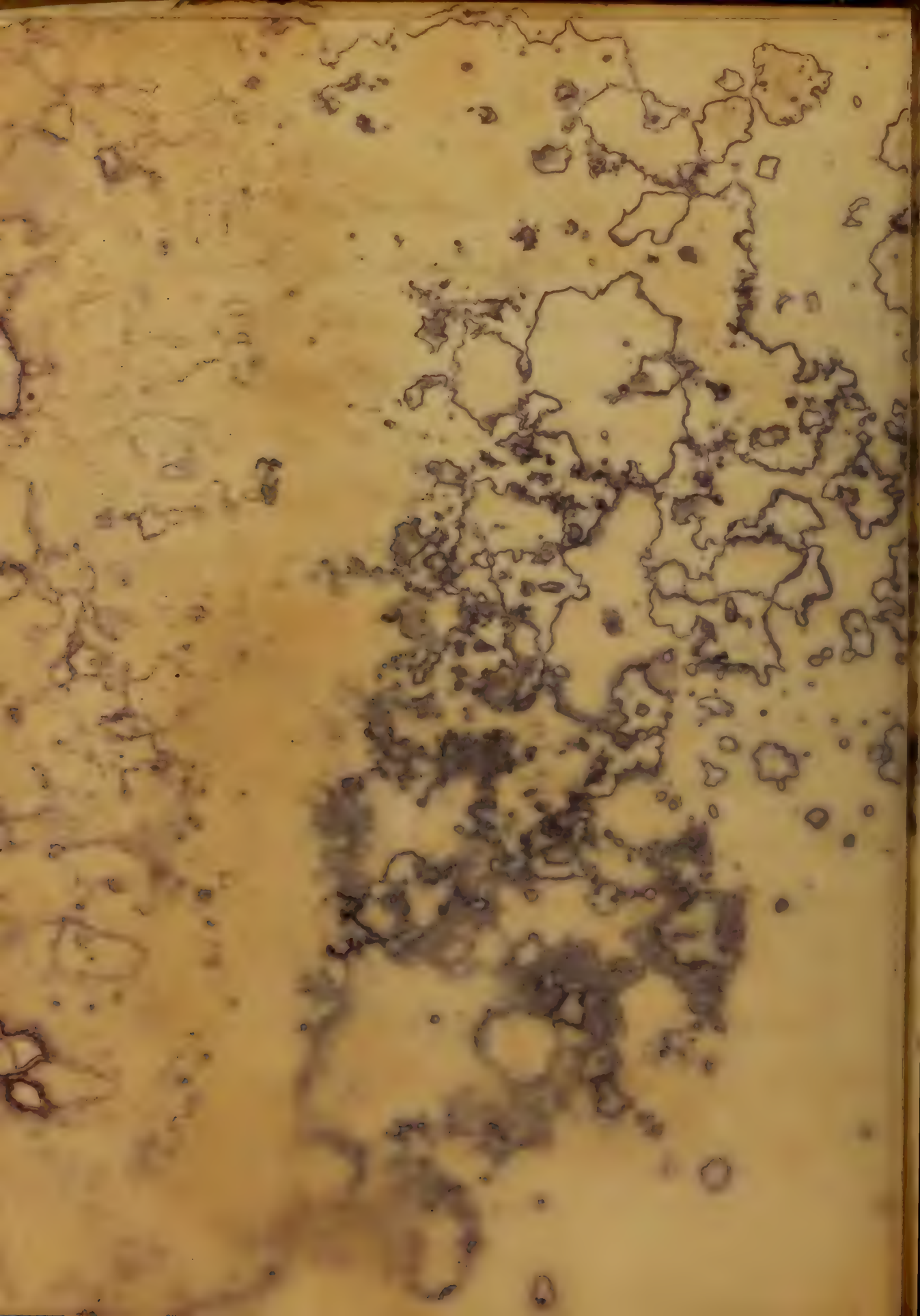
End

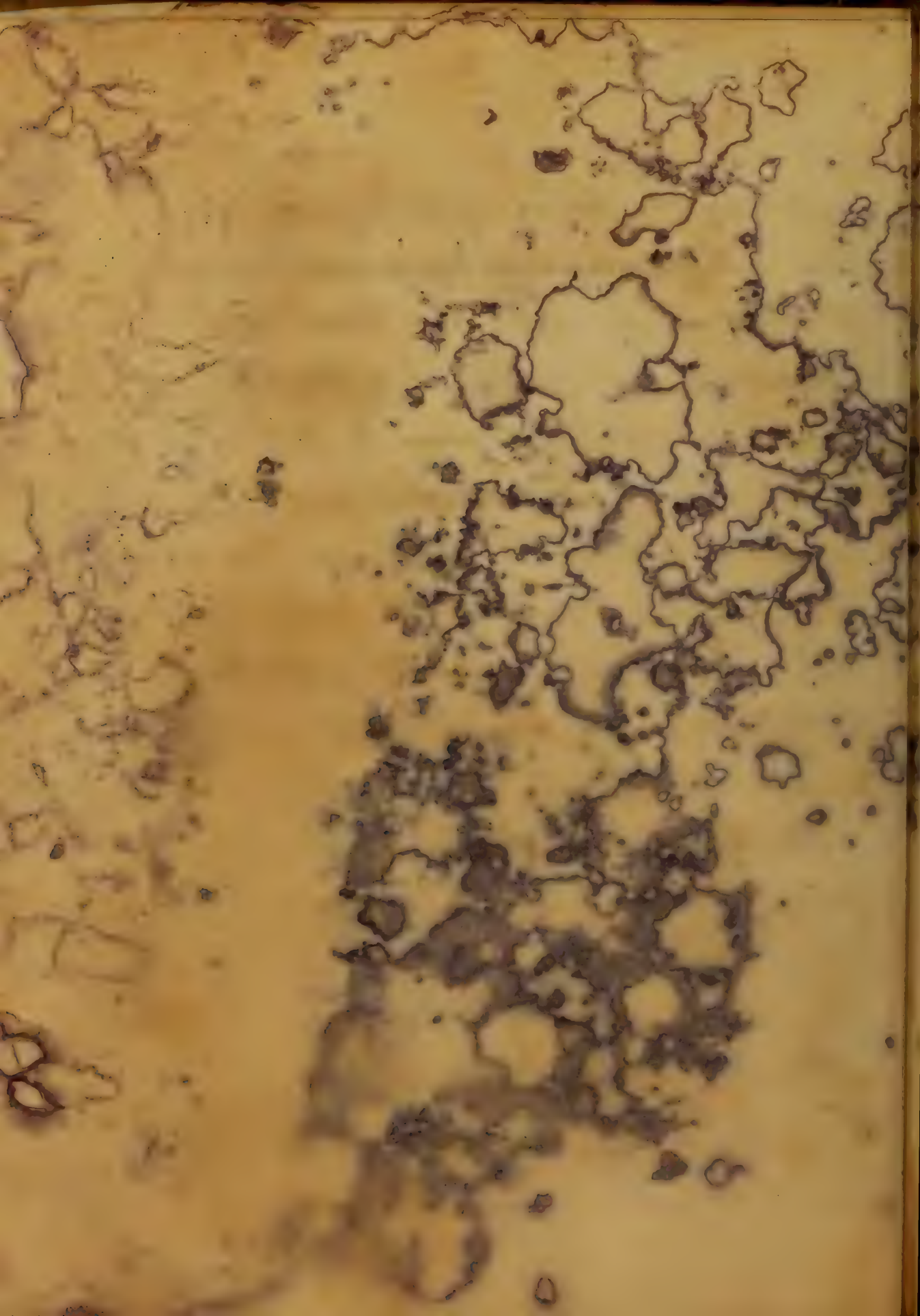
Thesis of
J. A. Shackelford
University of Miss.
Session. 1872-73



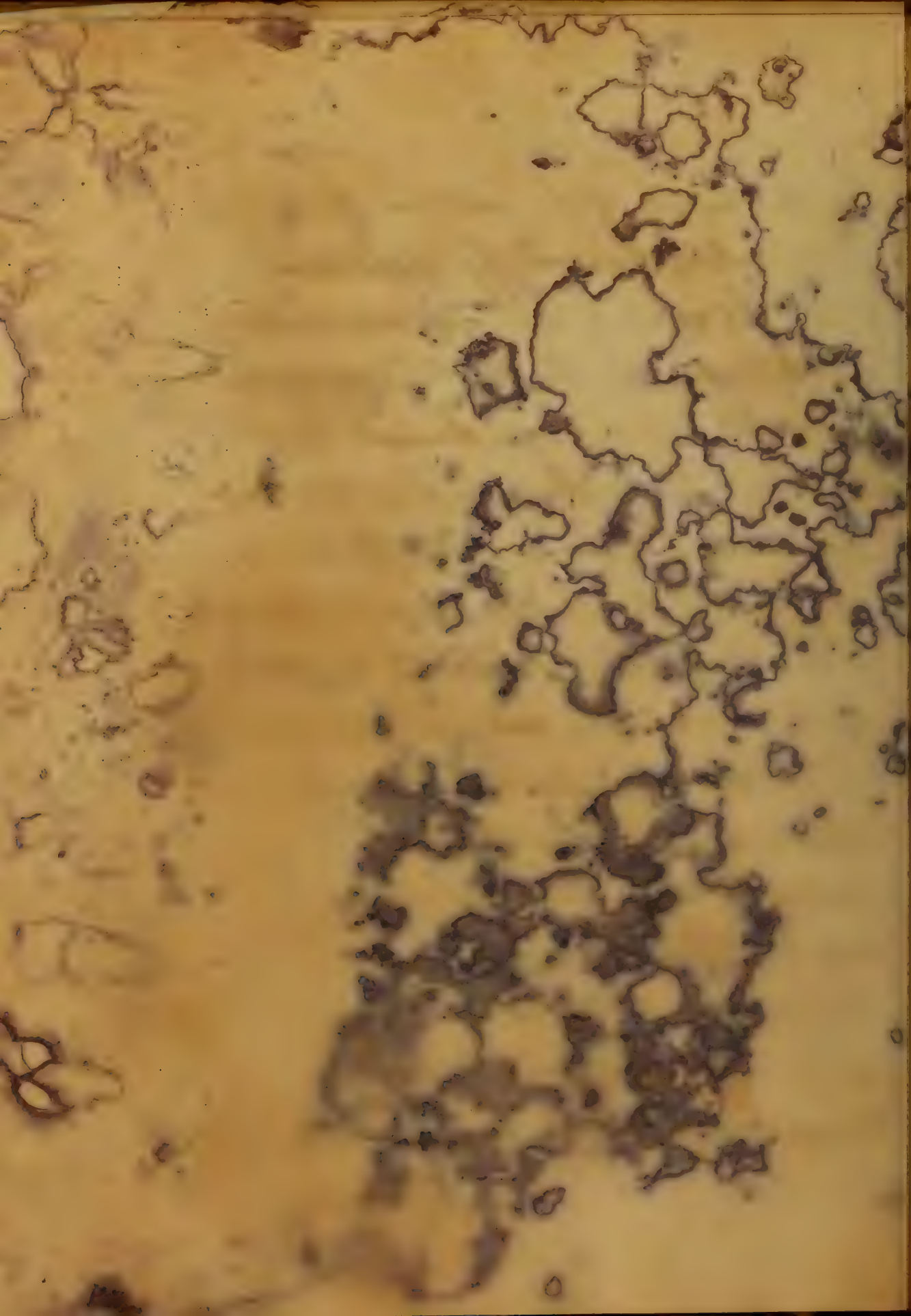


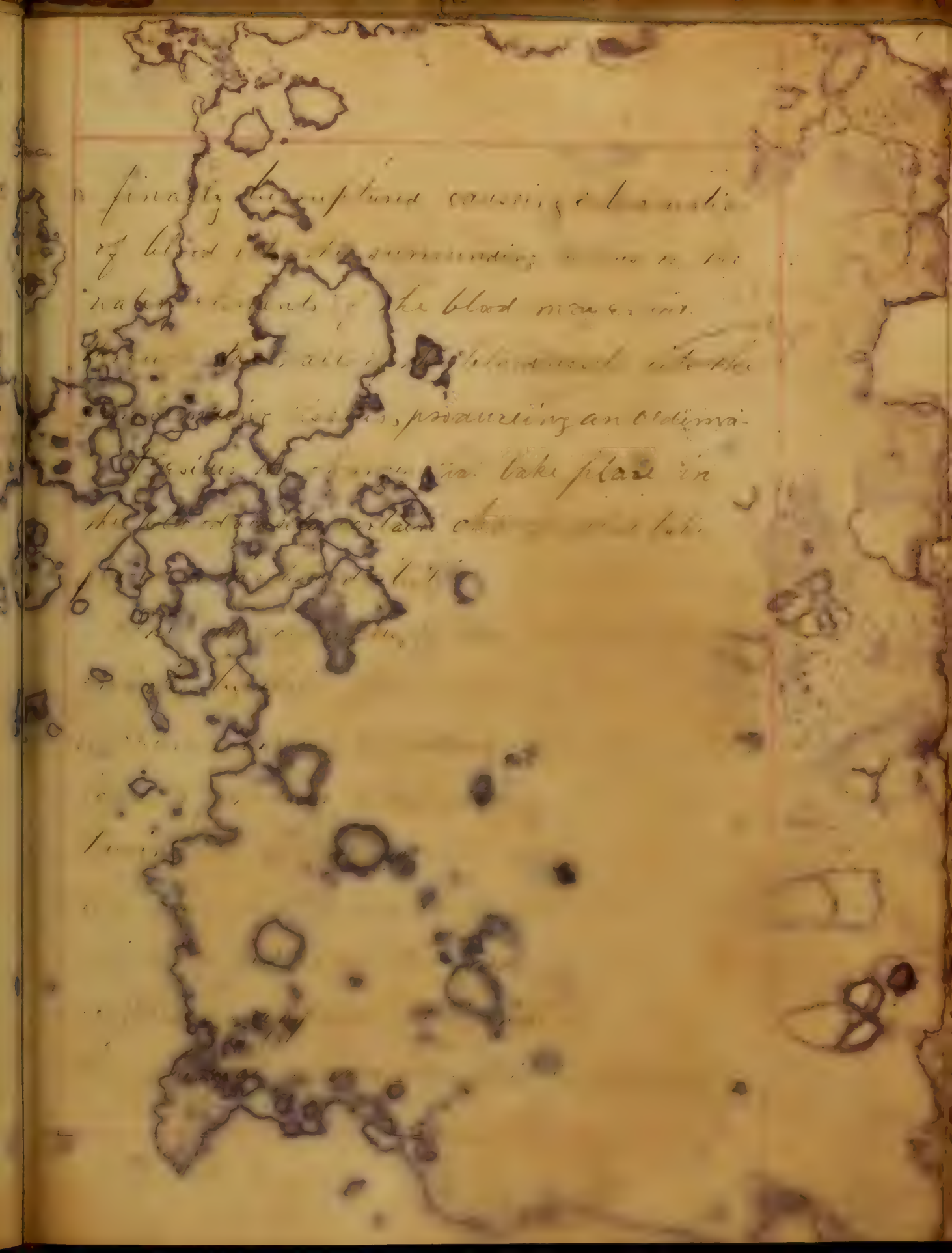


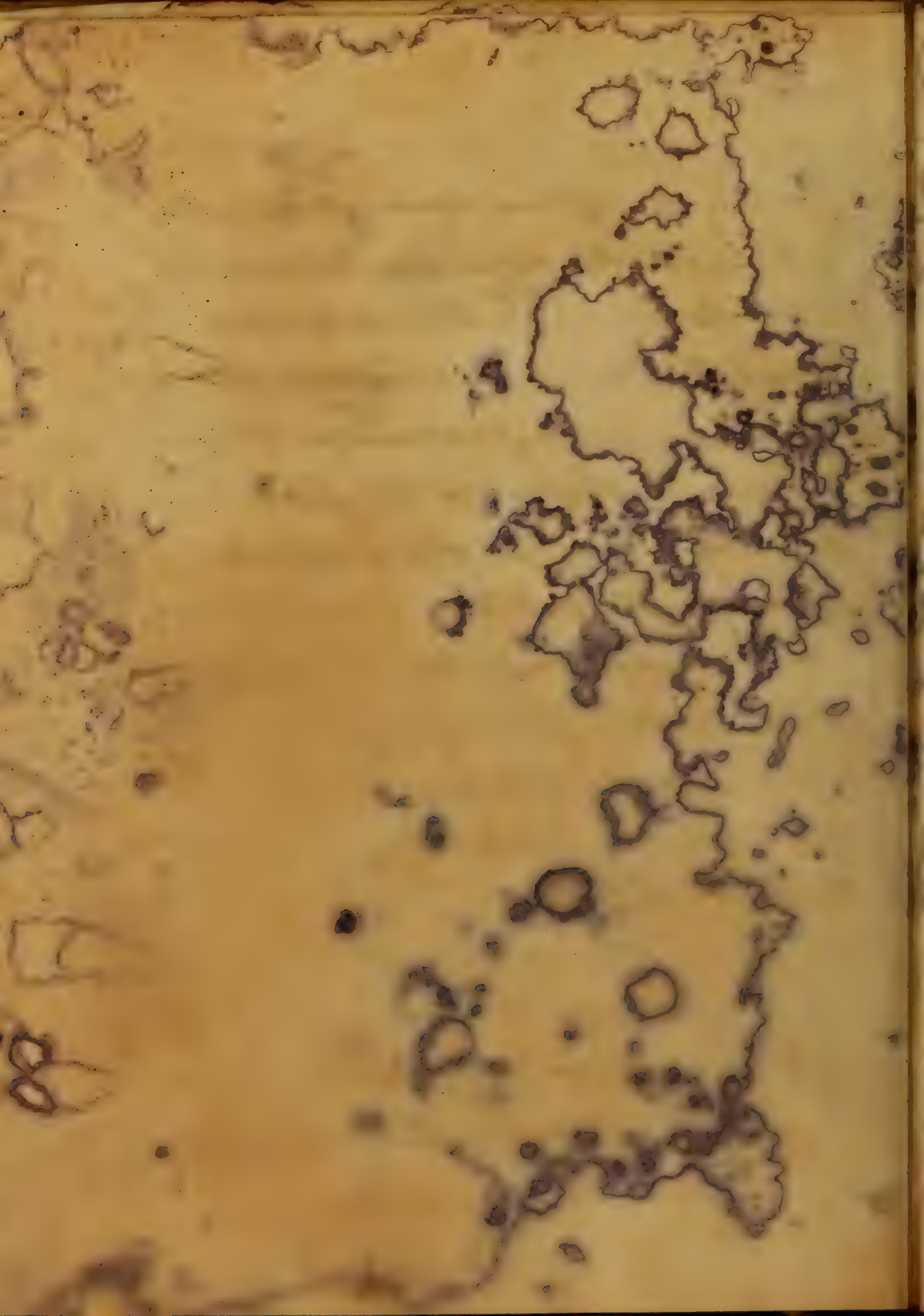


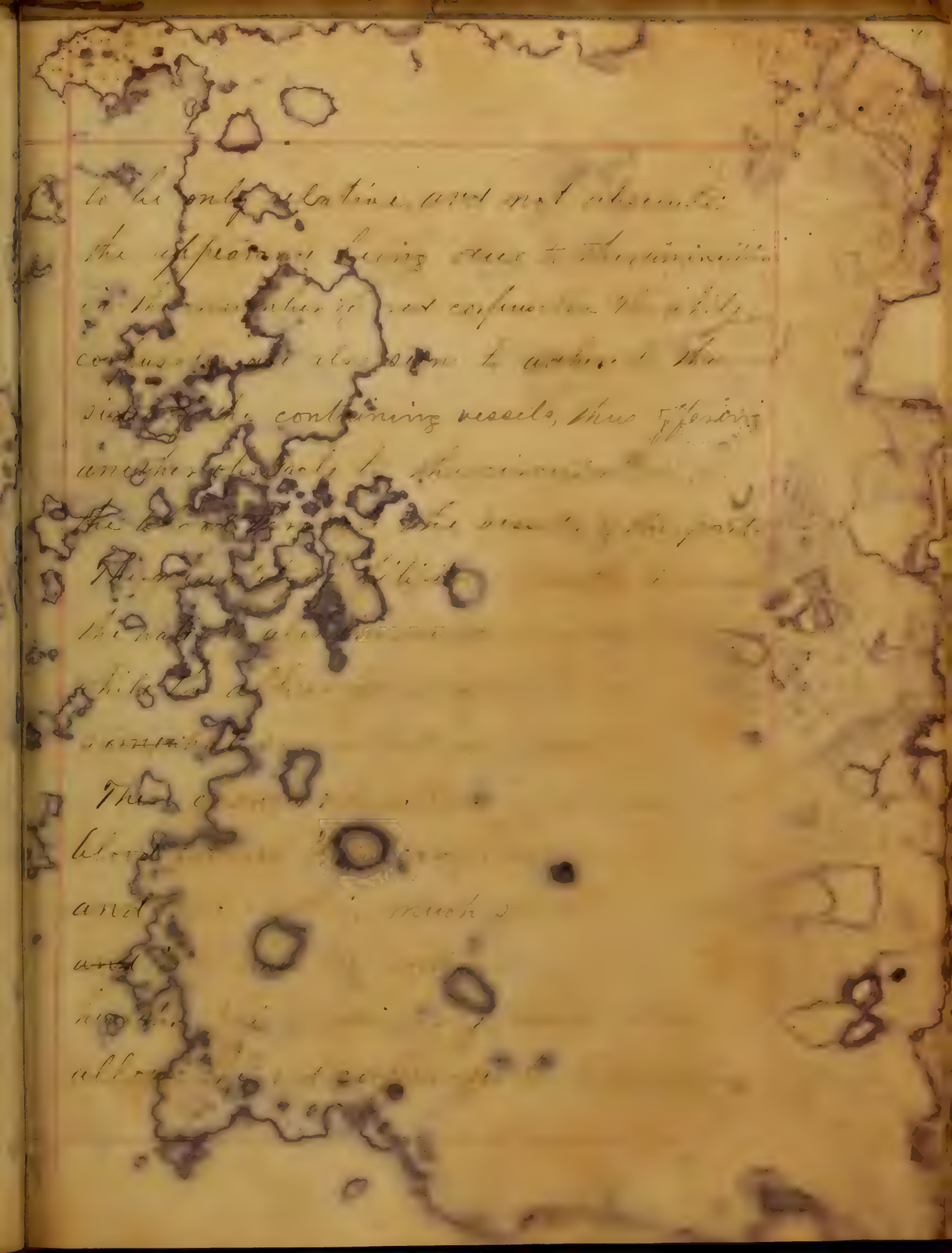


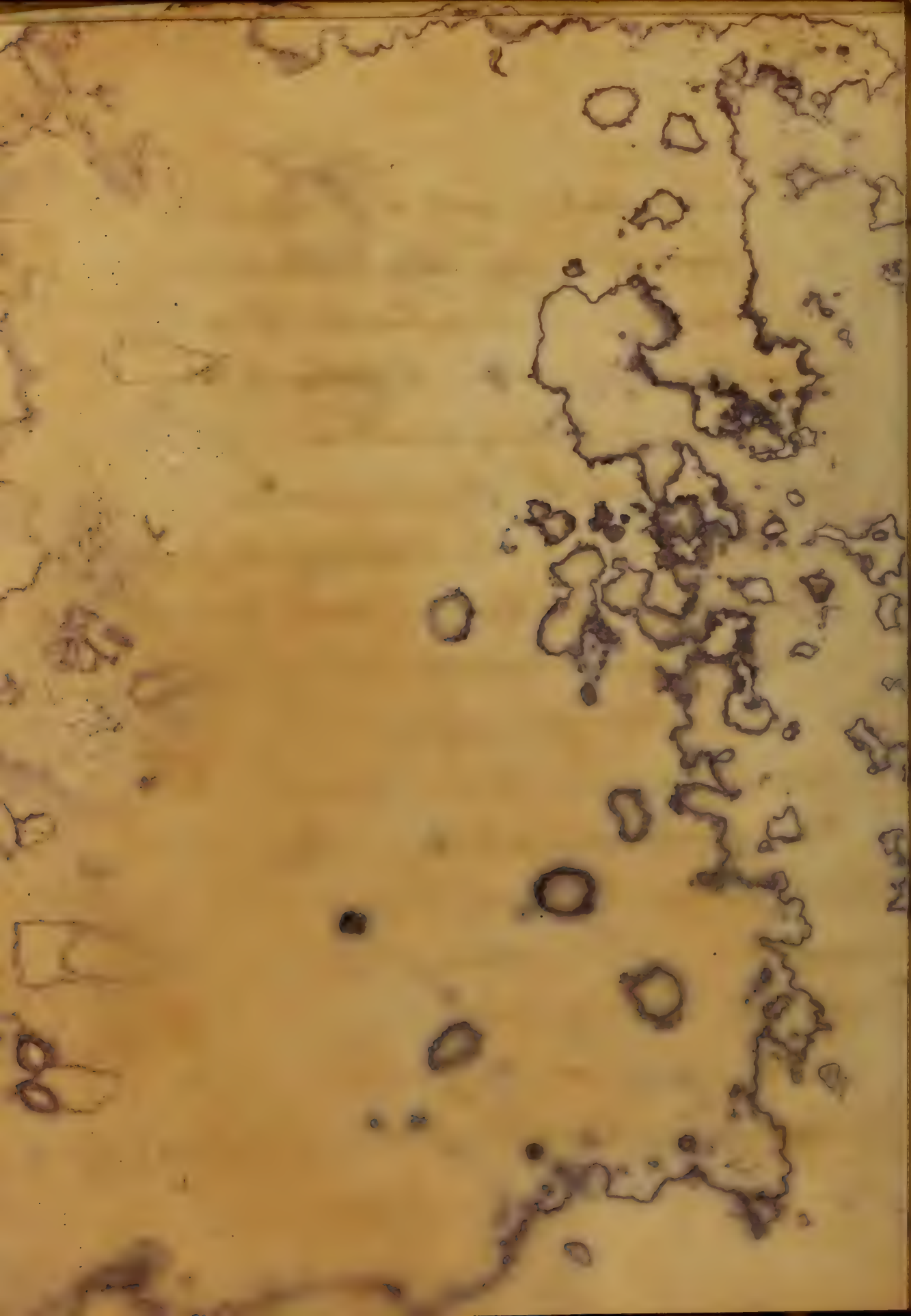
by the issues of the part, or the blood
circulating through the capillaries.
The result is the original morbid process
[illegible] at last becomes contracted
[illegible]



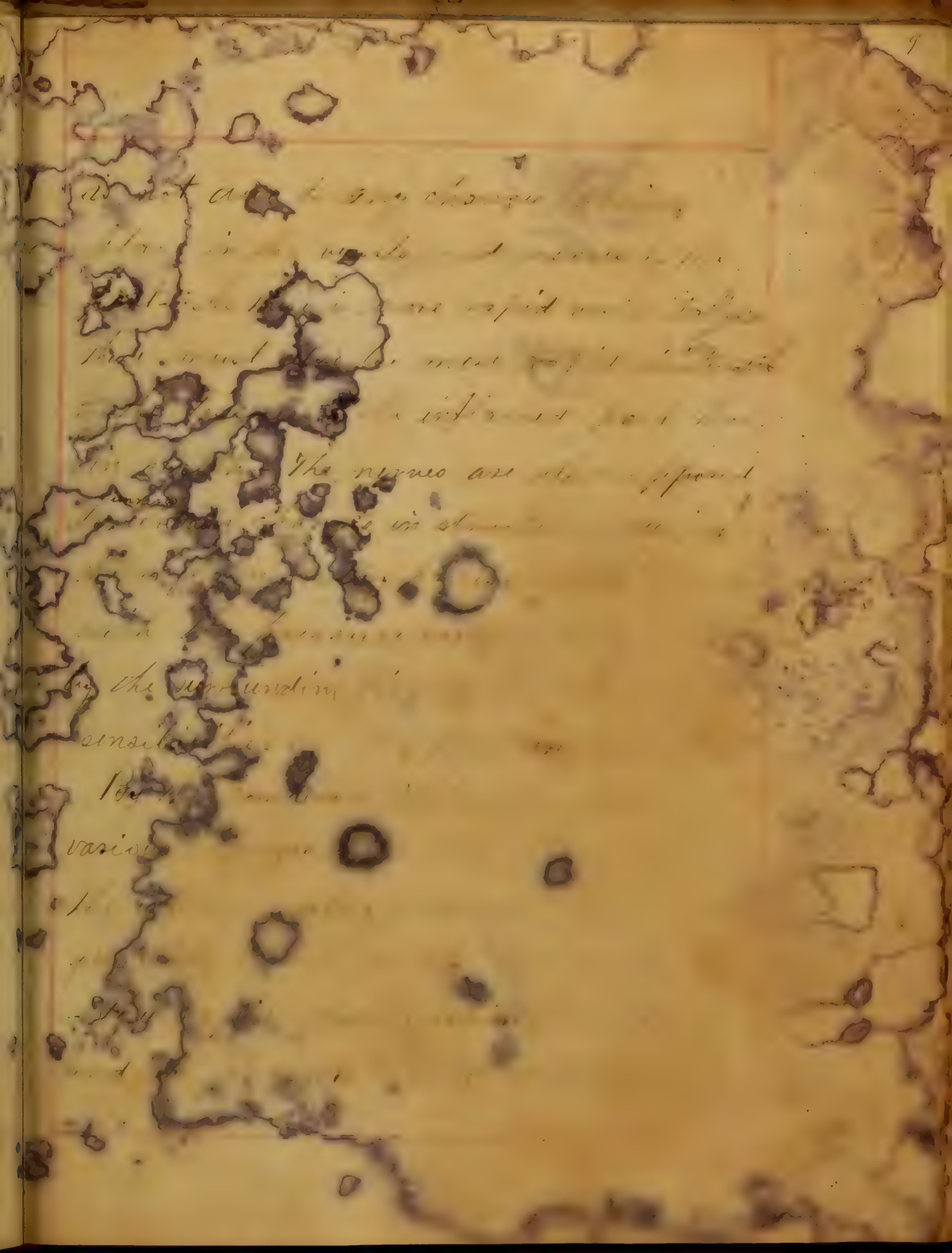








completely separated from the fibrin
and the corpuscles than in health



as they are formed, are of various
or marks on, colors
have a diameter
The
are called amaurosis,
or

is substantiated by examining [illegible]

[illegible] microscope-

[illegible] inflammation [illegible]

[illegible] satisfactorily explained;

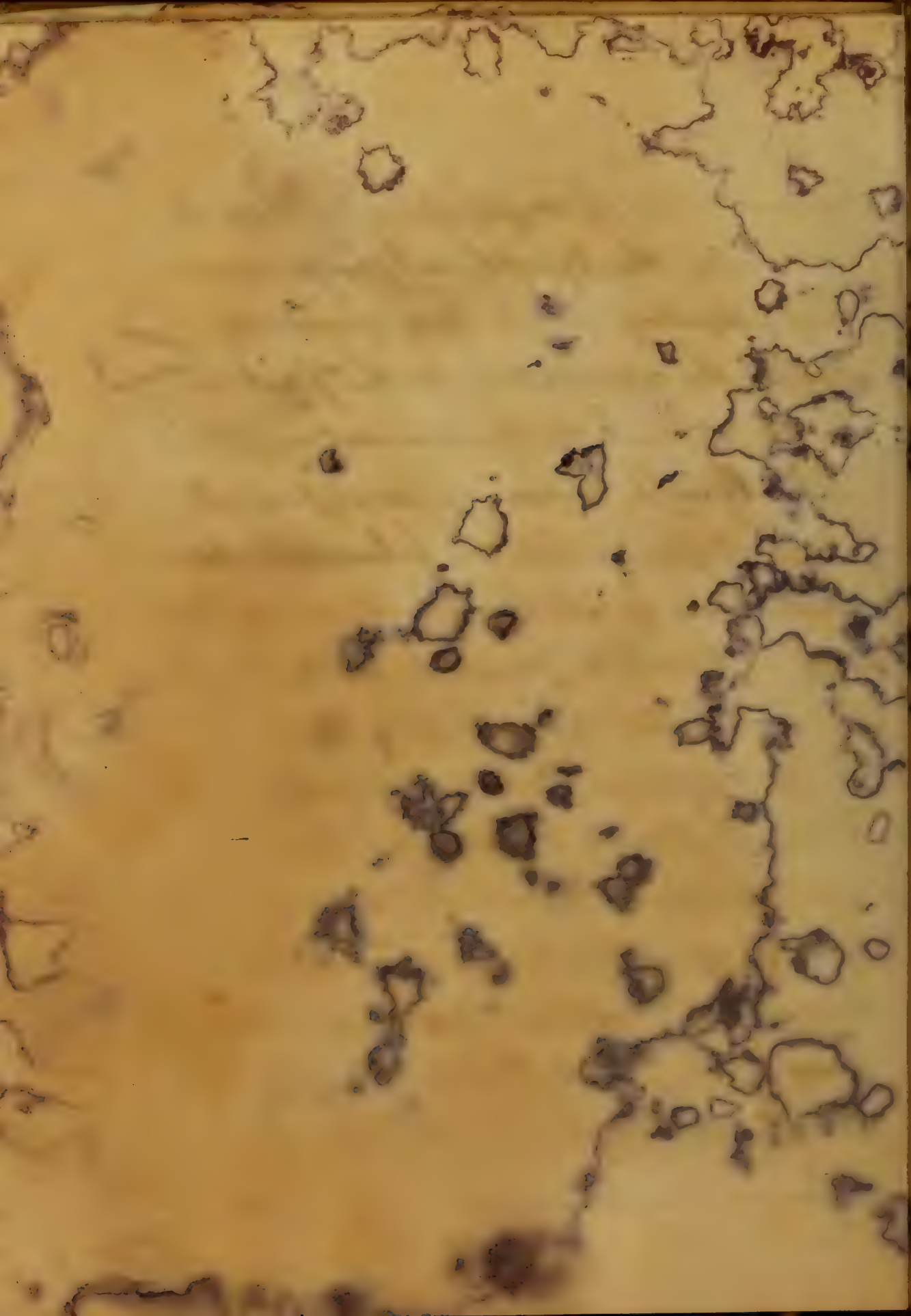
[illegible] supposing it to be

exuded [illegible] bloodvessels in a

[illegible] and consequently coagulating,

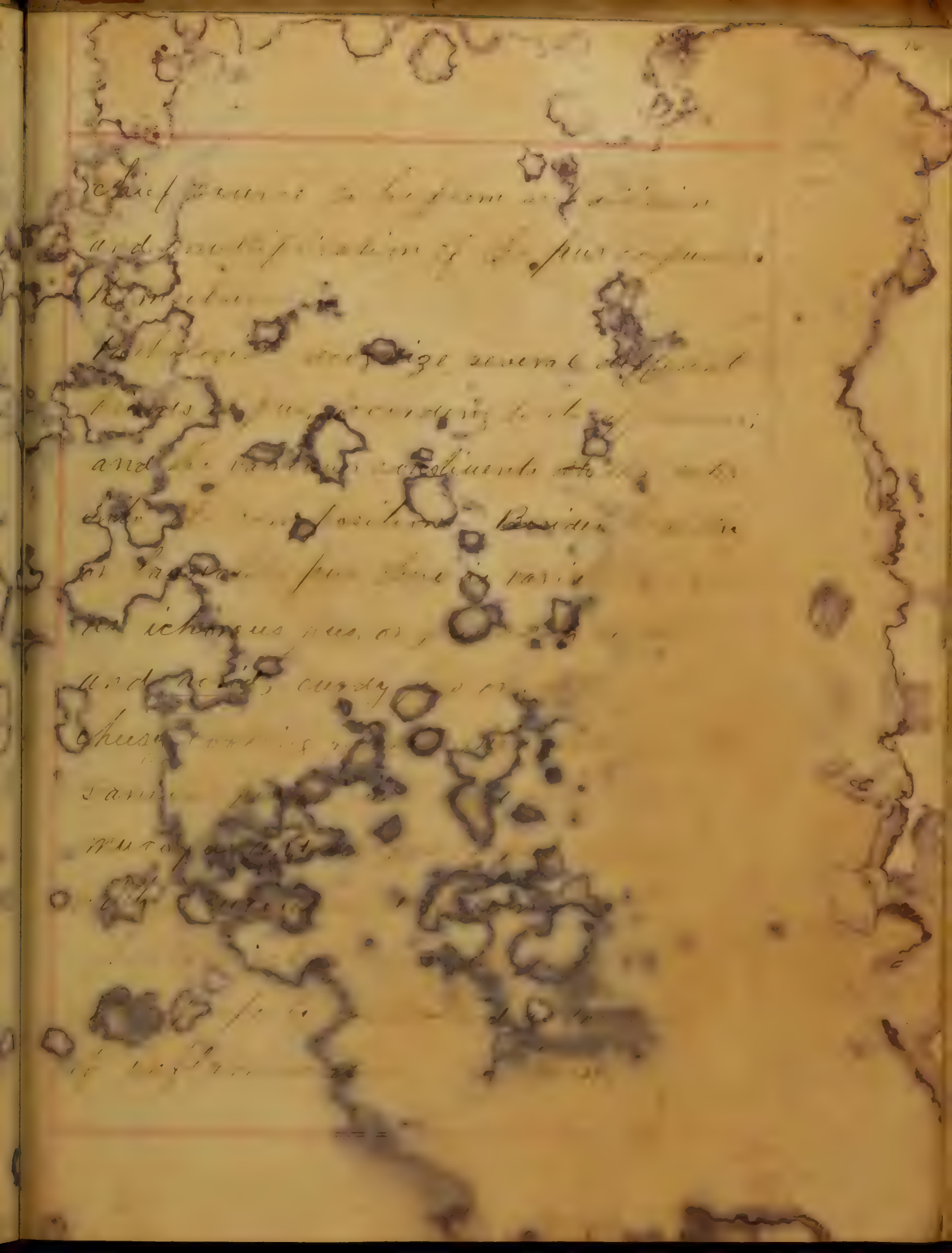
[illegible]

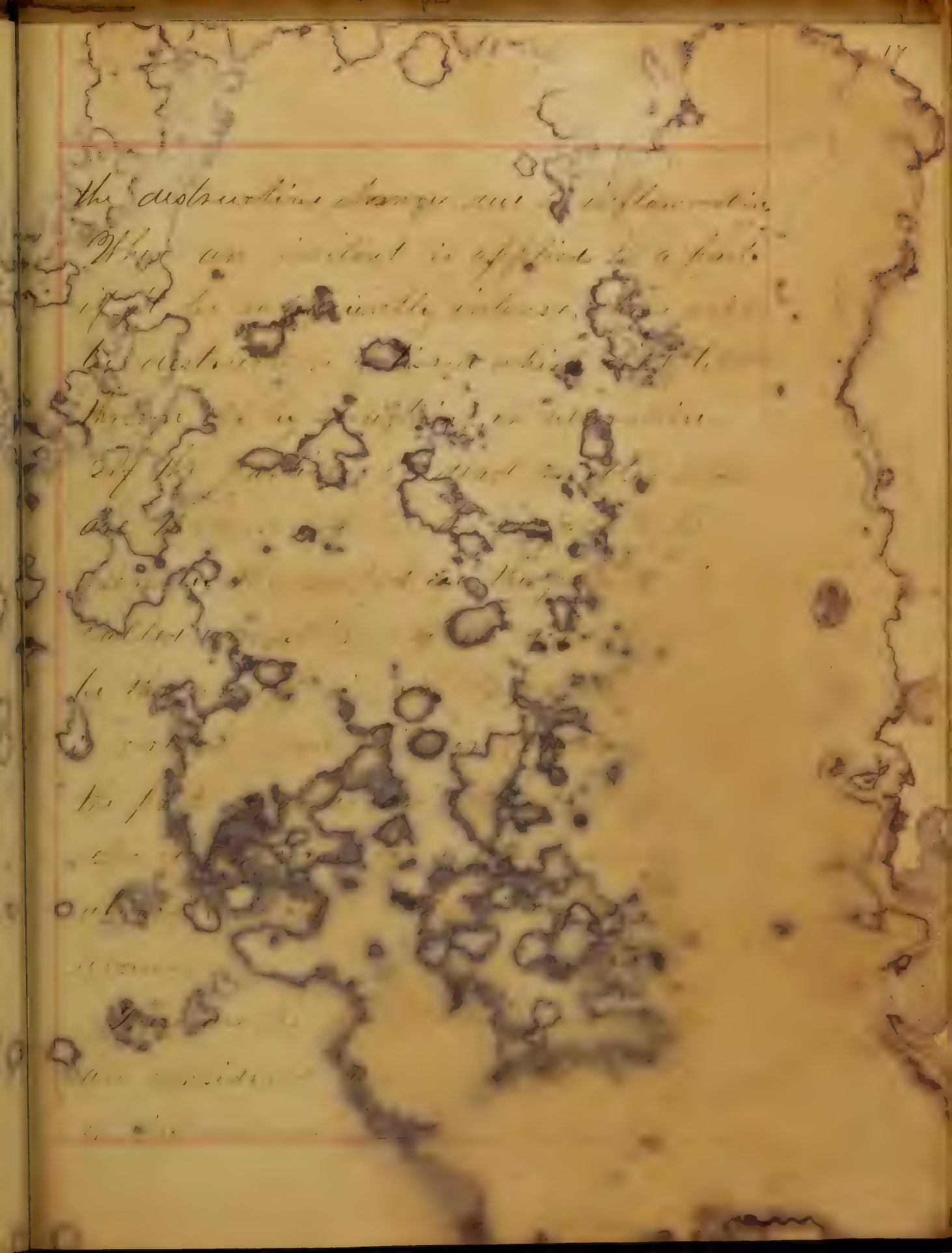
various forms of degeneration. When it
is absorbed the lymph corpuscles resume
their migratory habits and gradually
re-enter the circulation as the part is
brought back to its normal condition.
When lymph undergoes development
it passes into the fibro-cellular

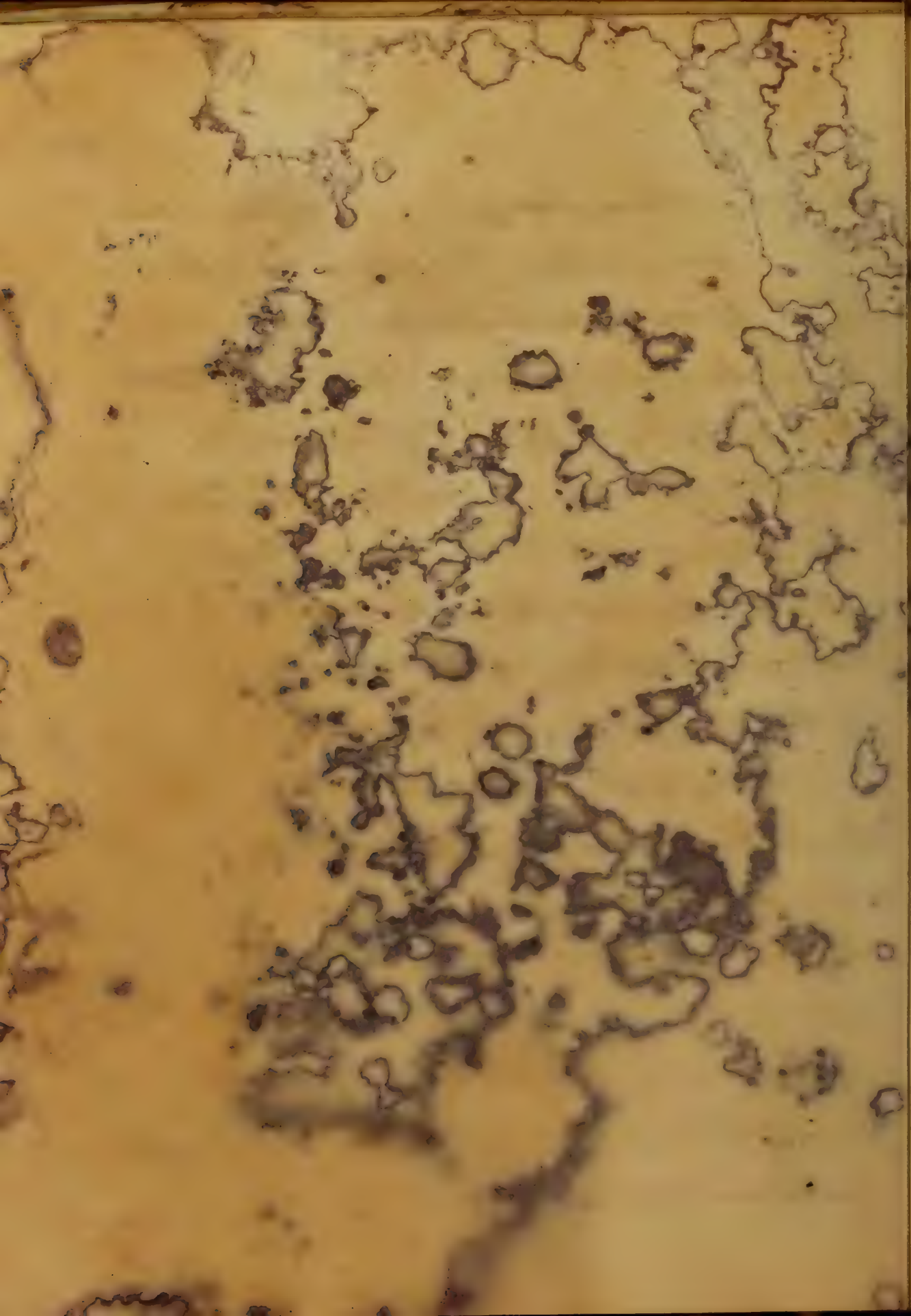


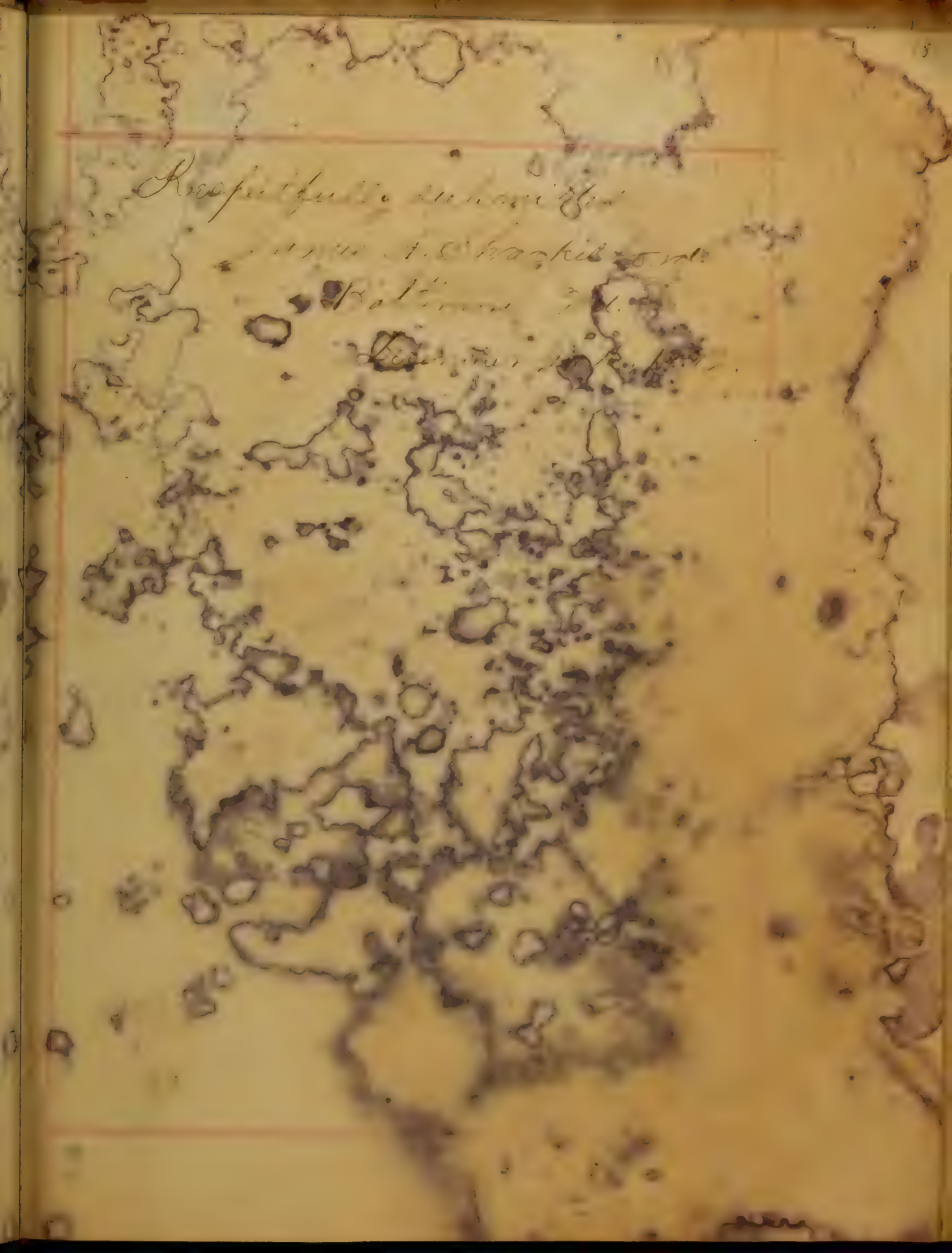
The various forms of inflammation of the
lymph may unite or calcareous, fatty,
granular, or it may become the seat
of [illegible] deposits, or when expos[illegible]
to the [illegible] become ulcerated, and
form [illegible] exhibiting [illegible]
[illegible] converted

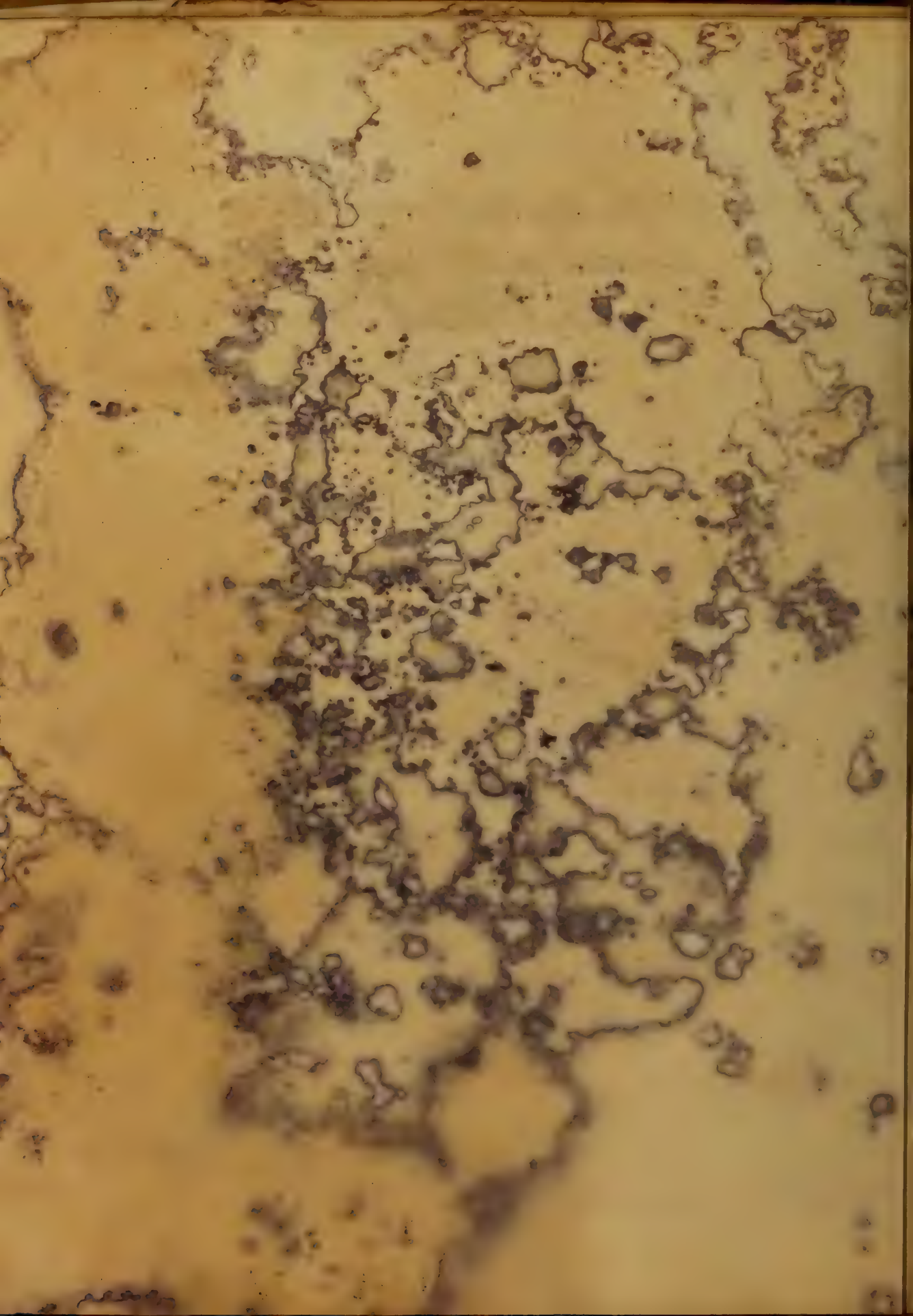
fatty matters, and a substance called











Thesis

Hernia

Ransom R. Crothers.

"Hernia"

Hernia signifies to protrude, or a protrusion of any viscus from its natural cavity; but the term by itself is restricted to signify a protrusion of abdominal viscera.

Cause. As hernia depends upon similar causes, the formation of hernia may be readily understood by considering that the abdominal viscera are subject to frequent and violent pressure from the diaphragm

and other muscles by which they are surrounded, a pressure which tends to force them outwards and downwards against the parietal walls of the abdomen, & any portion of these walls be insufficient to resist this pressure a hernia or ventral tumor may be formed.

Predisposing Causes. Therefore all weakness of abdominal parietes, which may be produced by various circumstances thus; some parts are naturally weaker than others, especially the Inguinal, the Crural Rings and the Umbilicus, and it is at these

that [illegible] ...d [illegible]
[illegible] ...n ...eathed [illegible] disease
on [illegible] Inguinal [illegible].

But ...n ...y the most
frequent [illegible] ...ing [illegible] ...
...ctain [illegible], ...tal, Sex and Occupation
DEX, [illegible] ...en ...e Sex ...ne liable
to this disease than ...men
in proportion, & about 4 to 1.
Thus according to Malgaigne
in France, one man in thirteen and
one woman in fifty two are subjects
of Hernia. Then are most liable
to Inguinal and Umbilical, and
women to Femoral Hernia, but
old ...men, being ...en ...

with the Inguinal Canal
Hernia occurs a natural
explanation when the frequency
of Hernia in children during the
first years of life is found to
correlate with age according to the
congenital deficiency.

Occupation. Those occupations in
which the individual is exposed to
violent muscular efforts predispose
strongly to Hernia.

Conditions presented by Hernia

The
conditions which Hernia may
be formed are various, but first
formed Hernia may be

is incomplete, that is has not passed entirely through the walls of the abdomen. But when first seen by the surgeon, it is usually complete, that is it has made its exit from the parietes of the abdomen Hernia, may be, reducible or irreducible, or Strangulated.

Reducible Hernia, Most Hernia is reducible at first, but the sack almost always forms adhesions and cannot be reduced,

Truss. In the treatment of reducible Hernia, our object is to retain the viscus or protrusion abdominal truss. In order to

the patient should be for a short
a longer limit of time, it should
be applied to the entire ring and
canal and so arranged as not
to permit the introduction of any
vessels into the internal orifice of
the canal.
Radical Cure of Hernia, the only
method which
is safely safe and humanely
successful is that of compression by
the truss, In this method of highly
instituted and diligently conducted
we think will prove successful
in a large majority of cases, especially
of children. This process should be

should be continued both day and
night and upon the entire canal
and internal area, The operations that
have been instituted on various
and have for their object the obstruction
of the canal by inflammation of
ich the effects by inflammation of
intestinal. The termination
is that of "Death" which consists
in approximating the lateral surfaces
forming the boundary of the luminal
canal by the obliteration of tissue
which promotes the adhesion of the
surfaces
The latter operation is that of
"Nutzes" which consists of

The neck of the sac is the
constriction of inflammation or
and occurs at once or immediately
at the scrotum. But in consequence
of the unsatisfactory results which
follow the majority of cases and
the danger associated with most of
the above operations are frequently
performed.

Irreducible hernia or usually
of long standing
and large size.

Causes. An irreducible hernia usually
depends upon adhesion, either of the
omentum or intestine

Treatment. The operation

encouragement for our cultivation
located in the valley of Santa
Rosa. Water enough, blue grass and
clover seem to be unfavorable conditions
for any good effect and likely to
bring about the conditions not
less grave, than we would
expect the most benefit from irrigation
such as protection to the pastured
lands and the wash of Gutta crowth
for disposing Eggs &c. Our reasons for
not expecting satisfactory results
depend much upon the height of
condition of the lands and the disastrous
effect the return of the rain floods
would work with us

account of the veins not being enlarged
hernia thereof its reduction and
which to some extent be accommodate
themselves to the situation of the hernia
Strangulated Hernia. This is a
condition of a protruded viscus which
becomes constricted or strangulated
by which its function and vitality
are arrested. This condition is met
with at all ages and in most cases
created by some violent effort by
a knuckle of intestines is protruded
through the abdominal wall or
an additional portion is protruded
into an already existing hernia
Mode of Strangulation. This may

to of her tubes, shows a smooth & uniform enlargement having been the distended tube.

Strangulation is characterized by extreme congestion of the distended parts, when the condition has taken place, passive congestion. Swelling, oedema and stagnation of blood occurs, should the constriction be excessively tight around, or a stage approaching it, occur in a few hours. But should the constriction be less severe or a strangulated hernia remain for a much longer time, [illegible]

~~with~~ from a wound received this
~~without~~ shortening death of the part.
mummification ensues
Point of Section the Skeleine is
usually outside the neck & neck
and for the most part in the sub-
scapular region surrounding
it although it has been seen
frequently in the neck & back. We
should expect this to accumulate from
irregular phenomena in the mechanism
of traumatic Vessels
Effects Local, the tissues become
congested, Hæmorrhage & blood ooze
after which inflammation is set
up, resection & not hospitably treated

in Germany. The Bowels have
at first a purple color, in time
changed, the coats become stiff,
the contiguous parts and a
serous fluid in the abdomen & sack
The appearance of inflammation does
not markedly change the color of
the Bowels, but the peritoneum
coated in spots with Lymph which
under it rough, the omentum is
sometimes thickish, when gangrene
ensue the bowels loses its polish,
becomes grayish or black, the various
coats disjulating readily, Dark brown
is at this time usually found in
the sack, which is often offensive

color.

Symptoms. The signs of the tumor
of breast, are of two kinds
Local and Constitutional,
Local signs, of a
Scirrhous Breast, the first change
noticed, is a sudden enlargement
of the tumor, of breast, it is found
it is found hard lumpy and
nodulated; more particular if it be
an internal, or mammal Breast
it is usually of a draughy feel and
less painful. Impulse is lost, no
effect is transmitted to it by
coughing. The latter may serve
as a diagnostic point in

determing the seat of the fracture
Constitutional symptoms, &c. for
as constriction
takes place in sufficient degree
to produce strangulation, the patient
becomes restless, & the strangulation
be of an acute character, acute
pain is experienced at the part
with symptoms of general prostration
The first thing that happens when
the gut becomes strangulated is
interference with the peristaltic action
of the intestines resulting in
constipation and vomiting and colicy
pains, inflammatory fever sets in
with rapid and distressful pulse

when gangrene ensues pain ceases
in the part, through it and
surface becomes covered with
perspiration.

Diagnosis, obstructed inguinal
Hernia in this there is no real
acute symptoms, on impulse is
felt when coughing. no vomiting
nor pain on pressure.
Inflamed Hernia, in this form of
Hernia, on impulse
is felt while coughing, the
vomiting less or elegia, constipation
incomplete, Treatment, the
object in the treatment of
strangulated Hernia is to remove

the fracture from the tumour.
This is effected by one of two
methods, (1) Reduction of bulk by
taxis, or dividing the fracture
Taxis consists in the gentle
effort to return the included
part through the orifice from
which it escaped. The method
should always precede the division
by the knife. By gradual application
of Taxis, accompanied by unwearying
measures such as chloroform,
we can often succeed in obtaining
the return and disengagement of
fracture. Rules regulating the
application of "Taxis" It should

resort to the method in all cases when it has not heretofore been instituted and we have reason to believe, that gangrene has not ensued. Before we attempt to reduce by this method we think it proper to avail ourselves of all aids that can be procured by warm applications, chloroform and ether in connection with these measures; but when all gentle manipulations fail, we then must resort to the second method, that of dividing the stricture. Circumscribed strictures of the rectum, this operation may be

performed in two ways, either by opening the neck, exposing the contents and dividing the stricture, or by dividing stricture outside, without opening neck. The method adopted is not so much importance as the principle on which it is done. Strangulation

And as in duty bound
Respectfully
R. R. Crothers.